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THE EVALUATION OF THE ALABAMA FOOD STAMP CASH-OUT DEMONSTRATION

ADMINISTRATIVE OUTCOMES, OVERALL CONCLUSIONS, AND APPENDICES

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GLOSSARY OF ABBREVIATIONS

AFDC	Aid to Families with Dependent Children
AME	Adult Male Equivalents (a measure of household size, scaled to take into account different nutritional requirements due to differences in age, gender, and pregnancy and lactation status)
ASSETS	Alabama State's welfare reform program, Avenues of Self Sufficiency through Employment Training Services
ATP	Authorization-To-Participate card (a card issued by county food stamp offices in Alabama and signed by clients that contains the specifications of coupon issuance for each client)
DHR	Alabama Department of Human Resources
EBT	Electronic Benefits Transfer (an alternative form of food stamp benefit issuance)
ENU	Equivalent Nutrition Units (a measure of household size, scaled to take into account different nutritional requirements due to differences in age, gender, pregnancy and lactation status, and numbers of meals eaten at home)
FCU	Food Consumption Unit (the household members who eat meals together)
FIP	Washington State's welfare reform program, Family Independence Project
FNS	U.S. Department of Agriculture, Food and Nutrition Service
FSP	Food Stamp Program
HH	Household
ID	Identification
MPC	Marginal Propensity to Consume (the increase in food purchases resulting from a $1.00 increase in income or in food stamp benefits)
MPR	Mathematica Policy Research, Inc.
NSLP	National School Lunch Program
RDA	Recommended Dietary Allowance (the daily consumption level of a nutrient believed to be sufficient for good health for most persons; it varies by age and gender)
SBP	School Breakfast Program
SSI	Supplemental Security Income

TFP	Thrifty Food Plan (used as the basis for setting levels of Food Stamp Program benefits)
UI	Unemployment Insurance
USDA	U.S. Department of Agriculture
WIC	Special Supplemental Food Program for Women, Infants, and Children

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EXECUTIVE SUMMARY

The Alabama Food Stamp Cash-Out Demonstration took place in 12 of Alabama's 67 counties during the period May through December, 1990. Under the demonstration, a small percentage of randomly selected food stamp recipients received their program benefits in the form of checks, rather than in the traditional coupon form. This report describes the impacts of the demonstration on the food-purchasing and food-use patterns of Food Stamp Program (FSP) recipients. It also describes the planning and implementation of the demonstration and assesses the impacts of cash-out on the costs of administering the FSP.

POLICY CONTEXT

The form of the benefits provided under the FSP has been an issue of long-standing debate. Advocates of the current coupon system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food. They contend that, despite some evidence of fraud and benefit diversion under the current system, the unauthorized use of food stamps is relatively limited. In addition, they contend that coupons provide some measure of protection to food budgets from other demands on limited household resources.

Advocates of cashing out food stamp benefits argue that the current system limits the food-purchasing choices of recipients and places a stigma on participation in the program. Moreover, they cite the cumbersome nature and cost of coupon issuance, transaction, and redemption.

The current debate about the desirability of one form of food stamp benefit over the other is limited by the paucity of available empirical evidence comparing coupon and cash food benefits. The U.S. Department of Agriculture, Food and Nutrition Service (FNS) conducted two studies in the early 1980s: (1) the evaluation of the Supplemental Security Income/Elderly Cash-Out Demonstration, and (2) the evaluation of Puerto Rico's Nutrition Assistance Program. Although both studies produced useful findings, they examined cash-out as applied to highly atypical food stamp populations--in the first instance, to elderly participants in the program, and, in the second, to participants in Puerto Rico, whose incomes are very low relative to those of participants in the mainland United States. Thus, the results of those studies could not be reliably generalized to the broader food stamp caseload.

Therefore, it is important to obtain additional information about the effects of cash-out, so as to better inform the policy debate. The Alabama Food Stamp Cash-Out Demonstration has been designed to allow a rigorous evaluation of the effects of cash-out. The Alabama demonstration is one of four tests of the cash-out approach that FNS has undertaken since 1989. The other three are: (1) the Washington State Family Independence Program (FIP), (2) the Alabama Avenues to Self-Sufficiency through Employment and Training Services (ASSETS) Demonstration, and (3) the San Diego Food Stamp Cash-Out Demonstration.

The Washington State FIP and the Alabama ASSETS demonstrations are testing cash-out in conjunction with other changes in the welfare systems in those states. However, the Alabama Food Stamp Cash-Out Demonstration, like the San Diego demonstration, is testing cash-out without any other changes. Therefore, it is of particular interest to compare the latter two evaluations. This report provides a number of such comparisons.

THE TIMING OF THE DEMONSTRATION

The Alabama Food Stamp Cash-Out Demonstration was implemented in two urban and ten rural counties in May of 1990. In those counties, approximately 4 percent of the existing caseload and 4 percent of new cases that entered the FSP over the course of the demonstration were randomly selected to receive benefits in the form of checks. December of 1990 was the last month in which cash benefits were issued under the demonstration. As of the date of this report, Alabama continues to issue cash benefits to food stamp recipients in three counties under the separate ASSETS Demonstration.

THE SETTING OF THE DEMONSTRATION

Alabama has a population of 4 million people. On average, those people are more likely to reside in rural areas than is true for the population of the United States as a whole. In addition, residents of Alabama are more likely to be unemployed or to have low incomes than is the case nationwide; Alabama's unemployment rate is one-third higher, and its average per capita income is 20 percent lower, than are those of the United States as a whole.

Alabama's low-income population depends heavily on food stamps. In 1989, 11 percent of the residents of Alabama received food stamps; only six states and the District of Columbia had higher proportions of residents receiving food stamps. At $146 in July of 1989, the average household food stamp benefit in Alabama was 10 percent higher than the $135 average in the United States as a whole. This difference is due, in part, to low levels of cash assistance benefits in Alabama. General Assistance is not available in Alabama, and Aid to Families with Dependent Children (AFDC) provides low benefit levels; in 1990, Alabama's maximum monthly AFDC payment of $118 for a three-person family was the lowest in the nation. Compared with food stamp households nationwide, a higher proportion of food stamp households in Alabama earn income, but the average amount of earned income is relatively low. In addition, food stamp households in Alabama are 60 percent more likely than food stamp households nationwide to be elderly.

These characteristics of Alabama and of those of its residents who are served by the FSP should be kept in mind when assessing the findings from the Alabama Food Stamp Cash-Out Demonstration and when attempting to generalize from those findings to other areas of the United States. The many large differences between food stamp households in Alabama and elsewhere (including other rural states and states with low AFDC benefits) suggest that the Alabama findings might generalize poorly to many other states. These factors highlight the importance of considering the Alabama findings jointly with the findings from the other contemporaneous cash-out evaluations.

RESEARCH QUESTIONS AND OUTCOME VARIABLES: RECIPIENT IMPACTS

This report addresses questions pertaining to the impacts of cash-out on recipients of food stamp benefits and on the administration of the FSP. The research questions and methodologies pertaining to the impacts of cash-out on food stamp recipients are identical in the evaluations of the Alabama and San Diego Food Stamp Cash-Out Demonstrations. They are as follows:

Does cash-out lead to reductions in the money value of food used at home? The regular coupon-based FSP provides benefits that, in general, can legally be used to purchase food only at authorized outlets, and to purchase only those items that are eligible under program regulations. This

earmarking of benefits is intended to further the stated objective of the FSP of "raising the levels of nutrition among low-income households" by encouraging recipient households to purchase food for use at home. Thus, the program's direct impact is expected to be on the amounts of food purchased for use at home. The analysis presented in this report examines the effects of cash-out on the money value of purchased food used at home in order to obtain direct evidence as to whether cash-out reduces the means (that is, the use of purchased food at home) through which the FSP is expected to affect nutrition.

The principal outcome measure in the analysis of the money value of purchased food used at home is based on detailed survey data on the use of food at home by households during the seven days that preceded a survey conducted as part of the evaluation. In some components of the analysis, we adjust this measure for differences in household size and composition by dividing the money value of food used by the number of "adult male equivalent" (AME) persons in the household. This measure states a household's size in terms of the number of adult males that would be expected to consume the same amount of food as the household would be expected to consume, given its age and gender composition. We also use a second adjusted measure of household size, the number of "equivalent nutrition units" (ENUs), which further adjusts a household's size to control for the percentage of all meals that its members eat from the home food supply.

The analysis also examines effects on the money value of *all* food used at home, including both purchased food and nonpurchased food. Although spending food coupons and food checks can *directly* affect the use of purchased food only, cash-out might have *indirect* effects on the use of nonpurchased food by making households more likely to use food received through government commodity distribution programs, food received from food pantries or other charitable organizations, food received as gifts from friends and relatives, or home-produced food. Therefore, it is important to assess not only the effects of cash-out on purchased food used at home, but also its effects on all food used at home.

The outcome measures for the analysis of the money value of all food used at home are drawn from the same survey as were the outcome measures described previously. They include measures adjusted for household age and gender composition, as well as for the percentage of meals eaten at home. We estimated the dollar value of nonpurchased food used by a household by using imputed prices; the imputed prices were the average values of the reported prices of similar food items that had been purchased by the households participating in the survey.

Does cash-out lead to reductions in the nutrients available to household members? To the extent that cash-out leads to reductions in the use of food at home, there might be associated reductions in the nutrients available to household members. For both check households and coupon households, we examine the average levels of nutrient availability in relation to the recommended dietary allowances (RDAs) for key nutrients.

Does cash-out lead households to run out of food? Critics of food stamp cash-out have been concerned that, under this form of benefit issuance, households might spend their benefits on nonfood products and services and, consequently, might run out of food by the end of each month. It is important to assess whether households ran out of food in the Alabama Food Stamp Cash-Out Demonstration. The analysis is based largely on the reported perceptions of respondents to the household survey regarding the adequacy of the food available to their households in the month preceding the survey.

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Does switching from coupon issuance to check issuance reduce or increase the incidence or amount of benefit loss, and in what specific areas? Loss of benefits can occur through theft during coupon production, shipment, and storage; overissuances due to clerical error; and excessive issuance due to the fraudulent use of authorization-to-participate cards. We assess the impact of the Alabama Food Stamp Cash-Out Demonstration on these types of losses by examining program data on reported losses, supplemented with narrative material from focus group discussions with FSP participants. Our findings include estimates of the amounts of loss borne by the state and federal governments, food stamp recipients, and third parties, and of how those losses changed under cash-out.

DATA COLLECTION

The findings on recipient impacts that we present in this report are based largely on data obtained from an in-person survey of 1,255 check recipients and 1,131 coupon recipients that we conducted between August and November of 1990. Of the responding households, 48 percent resided in the demonstration's two urban counties, and 52 percent resided in the demonstration's ten rural counties, thus closely approximating the 46 percent/54 percent urban/rural distribution of the entire food stamp caseload in Alabama.

The recipient survey obtained detailed information on household composition and income receipt. It also collected very extensive data on the foods used by each household during the seven days preceding the interview. In the survey, respondents were also asked questions about their households' attitudes toward and experiences with cash-out. The survey attained a response rate of 78 percent (80 percent among check recipients; 76 percent among coupon recipients) for the questions on household composition, income, and attitudes, and a rate of 75 percent (78 percent among check recipients; 73 percent among coupon recipients) for the questions on food use.

To supplement the recipient survey data, we also draw on information obtained during four focus group discussions with FSP participants. The discussions were held in one urban site (the city of Birmingham, in Jefferson County) and in one rural site (the town of Fayette, in Fayette County) with participants who had previously received their benefits as coupons, but whose benefit form had been converted to checks. Two sessions were held at each site, one with elderly program participants, and one with nonelderly participants. The focus groups enabled us to explore issues related to client experiences with cash-out in greater depth than was possible in the structured survey.

The findings on administrative outcomes that we present in this report are based on information obtained through in-person and telephone interviews with county-level and state-level FSP staff in Alabama, telephone interviews with representatives of advocacy groups, a mail survey of FSP staff who had handled check-issuance problems, and data compiled or tabulated by FSP staff. We supplement these sources with information obtained from program procedures manuals, official periodic reports on program operations, and other material. Some information was obtained from the focus group discussions with FSP participants. Federal-level issuance costs were obtained from an evaluation of a demonstration of the electronic transfer of food stamp benefits (Kirlin et al., 1990).

FINDINGS FROM THE ANALYSIS OF RECIPIENT IMPACTS

The evaluation of the Alabama Food Stamp Cash-Out Demonstration has produced little evidence of any effect of cash-out on food stamp recipients in Alabama. For almost all outcome

measures corresponding to the study's research questions on recipient impacts, the difference in mean values between check recipients and coupon recipients is small in an economic or nutritional sense and is not significantly different from zero in a statistical sense. This section summarizes the key findings of the study concerning each of the previously highlighted research questions on recipient impacts.

The money value of food used at home. The evidence from the household survey indicates that cash-out did not lead to a reduction in the money value of food used at home. As shown in Table 1, the mean weekly value of purchased food used at home (the measure of food use that is most directly affected by the FSP) is $54.85 for coupon recipients and $55.46 for check recipients. The 1 percent difference in mean values is not statistically significant. This finding of no reduction in the money value of food used at home under cash-out holds regardless of whether the outcome measure includes only purchased food or includes all food used at home, and regardless of whether the measure is scaled by ENUs to adjust for differences in household composition and differences in the percentage of meals eaten at home.

There is no evidence from this study that the absence of negative impact of cash-out on the money value of food used at home by all food stamp households is masking a negative impact on the subset of food stamp households that are at greatest nutritional risk. A comparison of check and coupon households in the lower tail of the cumulative distribution of the money value of food used at home per ENU revealed that cash-out had virtually no effect on the use of food by those households.

Nutrient availability. For food energy, protein, and seven micronutrients that are regarded as potentially problematic from a public health perspective, the estimated effects of the demonstration on availability from food used at home are small, ranging from 0 percent to 3 percent, and mixed in sign (Table 2). These small and statistically insignificant differences between check and coupon recipients support the conclusion that cash-out did not result in a reduction in nutrient availability. Data from the demonstration on the percentages of households for which the availability of these nutrients equals or exceeds the RDAs also support this conclusion. For example, the availability of food energy from food used at home was less than the RDA for 20 percent of both check and coupon households.

Running out of food. Cash-out did not increase the incidence of perceived shortages of food in households. Indeed, as shown in Table 3, the percentage of households that reported not having enough food during the month preceding the survey is 3 percentage points lower for check recipients than for coupon recipients (16 percent versus 19 percent). The interview question on which this finding is based asked whether respondents had always had "enough" food during the preceding month. We do not know exactly how respondents interpreted this concept. However, it is interesting to note that the percentages of check and coupon households that reported having not "enough" food are roughly equivalent to the percentages for which the availability of food energy from food used at home was less than the RDA.

Respondent reports on the skipping of meals by household members due to insufficient food also are consistent with the conclusion that cash-out did not increase the incidence of shortages of food. Again, check recipients were somewhat less likely than coupon recipients to report that one or more household members skipped meals during the month preceding the survey because food was unavailable.

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TABLE 1

MONEY VALUE OF FOOD USED AT HOME
(In Dollars per Week)

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Money Value of Purchased Food Used at Home					
For the overall household	55.46	54.85	0.61	1.13	0.43
Per equivalent nutrition unit[a]	33.43	33.66	-0.23	-0.69	0.31
Money Value of all Food Used at Home					
For the overall household	60.31	59.54	0.77	1.29	0.50
Per equivalent nutrition unit[a]	36.25	36.41	-0.16	-0.44	0.21

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: In this study, critical values of the t-statistic for a two-tailed test (for example, a test of the hypothesis that cash-out caused a *change* in food use) are 1.960 (95 percent confidence) and 1.645 (90 percent confidence); for a one-tailed test (for example, a test of the hypothesis that cash-out caused a *reduction* in food use), they are 1.645 (95 percent confidence) and 1.282 (90 percent confidence).

One-tailed statistical tests for lower money value of purchased food and all food used at home by check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

[a]Household size in "equivalent nutrition units" is an adjusted measure of household size that takes into account differences in recommended levels of food energy among households with different compositions in terms of the age, gender, and pregnancy and lactation statuses of household members. In addition, this measure takes into account the percentage of meals eaten at home by household members, as well as meals served by the household to guests.

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TABLE 2

NUTRIENT AVAILABILITY
PER EQUIVALENT NUTRITION UNIT
(Nutrient Levels as a Percentage of the RDA)

	Mean Value		Difference in Means		
Nutrient	Check	Coupon	Absolute	Percentage	t-Statistic
Food Energy	162.19	161.46	0.73	0.45	0.22
Protein	258.18	258.99	-0.81	-0.31	0.15
Vitamin A	227.32	229.71	-2.39	-1.04	0.26
Vitamin C	250.63	255.40	-4.77	-1.87	0.60
Vitamin B_6	157.59	157.30	0.29	0.19	0.09
Folate	223.94	221.69	2.25	1.02	0.39
Calcium	121.34	117.61	3.73	3.18	1.23
Iron	183.99	183.87	0.12	0.06	0.02
Zinc	127.28	128.87	-1.59	-1.23	0.56

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.

TABLE 3

RECIPIENTS' PERCEPTIONS OF THE ADEQUACY
OF THE HOUSEHOLD FOOD SUPPLY
(During Previous Month)

	Percentage of Respondents		Difference in Percentages		
	Check	Coupon	Absolute	Percentage	t-Statistic
Respondents Reporting Household Did Not Have Enough Food	16.02	18.57	-2.55	-13.74	1.64
Respondents Reporting Household Member Skipped Meals Due to Insufficient Food	8.21	9.90	-1.69	-17.12	1.44

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on the check-coupon differences shown in this table. None of the differences is statistically significant at the 90 percent confidence level or higher.

The household survey provides little evidence that check recipients were more likely than coupon recipients to avoid shortages of food by relying more heavily than coupon recipients on nonpurchased food or on government food-assistance programs. Both groups of recipients reported that they used home-produced food and food that they had received as a gift or as a payment-in-kind that had an average money value of about $4.75 per household per week. Check and coupon households also reported similar rates of participation in most government food-assistance programs. However, check recipients did report that they participated in government commodity-distribution programs during the month preceding the survey at a greater rate (20 percent) than did coupon recipients (17 percent). This difference is statistically significant at the 95 percent confidence level.

The purchase of food used away from home. Cash-out did not lead to an increase in the purchase of food used away from home, such as restaurant meals. Contrary to expectations, the mean weekly expenditure for food prepared and used away from home was slightly lower for check recipients than for coupon recipients ($3.29 versus $3.50, for the overall household). Similarly, check recipients reported eating a slightly lower percentage of their meals away from home.

Other types of consumption expenditures. One of the basic concerns about food stamp cash-out is that it might lead recipient households to shift their spending away from food used at home and to food used away from home and nonfood goods and services. Table 4 shows the percentage shares of total expenditures that households in the demonstration allocated to broad categories of consumer goods and services. This table shows that, relative to coupon recipients, check recipients did not allocate a smaller percentage of their total expenditures to food used at home, nor did they allocate a greater percentage to food used away from home. Among the nonfood consumption categories, the only category for which check recipients reported a significantly larger expenditure share than coupon recipients is the utilities component of shelter expenses. Check recipients reported allocating 1.1 percentage points more of their total consumption expenditures to utilities. Further investigation would be required to determine if this difference was actually caused by cash-out.

Participant attitudes toward cash-out. Virtually all benefit recipients who participated in the focus group discussions preferred checks to coupons. The major reasons given for this preference were: checks can be used to purchase nonfood items, such as paper products; receiving checks by mail is more convenient than picking up coupons in-person at the food stamp office; and check benefits promote the self-esteem of recipients.

The respondents to the household survey were asked a series of open-ended questions about the aspects of check and of coupon issuance that they thought were good and bad. The advantage of checks most commonly cited by check recipients was that checks can be used to purchase items other than food. Forty-three percent of the check recipients who responded to the survey mentioned this characteristic of checks (Table 5). It is not necessarily the case that these respondents actually used their check benefits to buy nonfood items. The second most commonly mentioned advantage of checks was that they eliminate the need to go to the food stamp issuance office. The frequent mention of this characteristic reflects the fact that, in Alabama, food stamp coupons are typically issued over-the-counter at food stamp offices, whereas food stamp checks were issued by mail. Sixteen percent of check recipients mentioned the elimination of the need to go to the food stamp office to pick up their benefits as an advantage of checks.

Coupon recipients tended to cite as an advantage of coupon issuance the fact that coupons ensure that benefits are spent on food. Thirty-eight percent of the coupon recipients who responded to the survey mentioned this characteristic of coupons. Thirteen percent of coupon recipients mentioned a related advantage, that coupons make it possible to budget food expenses better. In

TABLE 4

EXPENDITURE SHARES, BY CONSUMPTION CATEGORY
(Entries Are Percentages of Total Expenditures in Each Category)

Consumption Category	Mean Percentage Share of Total Expenditures		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
All Purchased Food	43.31	43.43	-0.12	-0.27	0.15
Food at home	41.34	41.27	0.07	0.17	0.09
Food away from home	1.98	2.17	-0.19	-8.77	0.94
All Shelter	33.98	32.80	1.18	3.59	1.53 †
Housing	14.16	14.04	0.12	0.89	0.21
Utilities	19.82	18.76	1.06	5.61	1.88 ††
Medical	4.70	4.43	0.27	5.96	0.66
Transportation	8.28	8.60	-0.32	-3.72	0.72
Clothing	5.23	5.62	-0.39	-6.97	1.08
Education	1.02	1.26	-0.24	-18.85	1.91
Dependent Care	0.62	0.81	-0.19	-23.78	1.37
Recreation	1.47	1.61	-0.14	-8.47	0.89
Personal Items	1.39	1.43	-0.04	-3.16	0.42
Total	100.00	100.00			
Mean Total Expenditure	$633.05	$632.49			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower expenditure shares for "all purchased food" and for "(purchased) food at home" and for greater expenditure shares for other consumption categories among check recipients were performed on the check-coupon differences shown in this table.

†Statistically significant at the 90 percent confidence level, one-tailed test.
††Statistically significant at the 95 percent confidence level, one-tailed test.

TABLE 5

MOST COMMONLY MENTIONED ADVANTAGES OF CHECKS AND COUPONS

	Percentage of Respondents Mentioning Advantage
Advantages of Checks[a]	
Can be used for items other than food	42.9
Do not have to go to issuance office	16.2
More choices of food stores	5.7
Do not feel embarrassed	5.3
Does not involve standing in line for a long time	5.3
More convenient/easier to spend	5.3
Advantages of Coupons[b]	
Make sure benefits spent on food	37.8
No sales taxes charged	25.8
Can budget food expenses better	12.6

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

[a]Sample limited to check recipients.

[b]Sample limited to coupon recipients.

Alabama, state and county sales taxes are charged on all cash purchases of food, including purchases made with the proceeds of food stamp checks. Despite the fact that the state augmented the check benefits to offset the sales tax, 26 percent of coupon recipients cited the absence of sales taxes on coupon purchases of food as an advantage of coupon issuance. It is likely that many coupon recipients were unaware of the sales tax offset that was added to the check-benefit amounts.

Check-cashing experiences. Seventy-three percent of check recipients cashed their food checks at a supermarket, grocery, or other food store, and another 23 percent cashed or deposited them at a bank (Table 6). Most of these establishments did not charge fees for cashing food stamp checks. Fewer than 1 percent of check recipients used check-cashing outlets, which did charge fees.

The vast majority of check recipients (91 percent) paid no fee to cash their food stamp checks. Most of those who did pay a fee paid $1 or less (57 percent of fee payers).

FINDINGS FROM THE ANALYSIS OF ADMINISTRATIVE OUTCOMES

The evaluation of the Alabama Food Stamp Cash-Out Demonstration provides findings on the lessons learned during the planning and implementation of the demonstration, and on the impact of cash-out on administrative costs and benefit losses. This section summarizes the key findings of the study concerning each of the previously highlighted research questions on administrative outcomes.

The planning and implementation of cash-out. A number of Alabama officials, most notably the Commissioner of the Alabama Department of Human Resources (DHR), were eager to implement a cash-out demonstration. Most of their efforts to achieve that goal occurred in the context of the ASSETS welfare reform demonstration; however, those efforts also made feasible the implementation of "pure cash-out"--the Alabama Food Stamp Cash-Out Demonstration. To garner public support for these demonstrations, the Commissioner and other high-level DHR staff participated in legislative hearings on welfare reform, attended meetings with FSP and public housing staff, and presided over informational meetings on cash-out and welfare reform for retail trade associations, county DHR directors, civic groups, and advocacy groups.

One key issue that had to be resolved before cash-out could be implemented was how to compensate check recipients for state and county sales taxes, which are levied on cash purchases of food, but not on coupon purchases of food. DHR resolved this issue by allocating its own funds to be used to augment the food stamp benefit of each check recipient by 7 percent, the approximate amount of the sales tax. This recurring monthly cost made DHR sensitive to the duration of the demonstration.

The development of the computer software that was an integral component of the check-issuance system was a major challenge in implementing the demonstration. This work absorbed considerable resources, primarily in the form of labor hours by the staff of DHR and a DHR contractor. The software development required more labor hours and more calendar time than was originally anticipated, which was one reason why the implementation of cash-out was delayed by four months, from January to May of 1990. The development of the software was complicated by two factors: (1) Alabama was implementing two related demonstration programs simultaneously ("pure cash-out" and ASSETS), and (2) some modifications to the cash-out automated system, which had been made before the evaluator of the pure cash-out demonstration was hired, had to be changed to fit the needs of the evaluation. With the exception of the modifications to the automated system, cash-out was implemented very smoothly. In addition to the systematic groundwork laid by the Commissioner,

TABLE 6

CHECK-CASHING EXPERIENCES OF CHECK RECIPIENTS

Check-Cashing Experience	Percentage of Respondents
Place Where Check Is Usually Cashed	
Supermarket, grocery store, or other food store	73.3
Bank	23.4
Check-cashing outlet	0.3
Other	3.0
Was a Fee Charged to Cash Check?	
Yes	9.2
No	90.8
Amount of Check-Cashing Fee, if Fee Was Charged[a]	
$0.01 to $1.00	56.9
$1.01 to $5.00	38.8
$5.01 or more	4.3

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

[a]The statistics given in this section of the table are based on the fee amounts that were reported by the 116 households that reported paying a fee to cash their food stamp checks.

an important factor in the ease of implementation was the training provided by DHR to its county and state staff. A DHR staff trainer who was well-informed about cash-out worked full-time to ensure that all relevant DHR staff had a good working knowledge of cash-out and of its associated new procedures.

We estimate that the labor and associated costs of planning and implementing cash-out were $183,000, with the majority of that amount going to software development. This estimate includes fringe benefits, but does not include overhead. It also includes the cost of contracted services and products.

Issuance costs. We found that costs were indeed lower under check issuance than under coupon issuance. Overall, check issuance cost $1.03 per case-month, or about one-half the cost of coupon issuance, which was $2.05 per case-month. Columns A and B of Table 7 show that issuance costs incurred at the federal level ($0.51 per case-month under coupon issuance) were eliminated under check issuance. Issuance costs incurred at the county and state levels were $1.54 per case-month under coupon issuance, but were only $1.03 per case-month under check issuance. The federal government pays 100 percent of issuance costs incurred at the federal level, as well as 50 percent of the costs incurred at the county and state levels. This allocation of responsibility for the payment of issuance costs is reflected in Columns C-E of Table 7, which show that three-quarters of the savings in issuance costs resulting from cash-out accrued to the federal government and one-quarter accrued to the state government.

Benefit losses. Food stamp cash-out in Alabama virtually eliminated several types of benefit losses that had been borne by either the state or the federal government under coupon issuance. However, these types of losses are quite small under coupon issuance, thus precluding the possibility that cash-out might achieve substantial cost savings in this area.

One type of loss, losses and thefts in the mail, increased significantly under cash-out. This increase was due largely to the increased use of mail issuance under the demonstration. Under coupon issuance in Alabama, most issuances are made on an over-the-counter basis, which is a relatively secure (although expensive) form of issuance. The mail issuance of coupons is generally restricted to small benefit amounts. Under cash-out, food stamp benefit checks were sent to program participants through the mail, an issuance mode that is substantially more vulnerable to losses. Costs resulting from checks being lost or stolen in the mail and then fraudulently cashed averaged $0.14 per case-month under cash-out. Because the average mailed benefit amount is substantially lower under coupon issuance than under check issuance, the mail loss of benefits is much lower ($0.05 per mail-issuance case-month) under coupon issuance than under check issuance. This difference should not be interpreted as evidence that coupons are more secure than checks when issued through the mail.

Overall, the analysis implies that issuance-system vulnerabilities increased as a result of cash-out. This increase occurred primarily because of the issuance of food stamp checks by mail, rather than because of the change in the form of benefit. Thus, the additional costs arising from the loss and theft of food stamp checks in the mail is less a cost of cash-out than it is of the change in the mode of delivering benefits to clients. The costs resulting from the loss and theft of benefit checks in the mail were borne by the third parties, such as banks and stores, that cashed the fraudulent checks. (Under the regular coupon-issuance system, the federal government bears the cost of replacing benefits that have been lost in the mail.)

TABLE 7

COUPON-ISSUANCE AND CHECK-ISSUANCE COSTS PER CASE-MONTH, BY LEVEL OF GOVERNMENT AT WHICH COSTS ARE INCURRED AND PAID
(In Dollars)

	Costs Incurred		Costs Paid		
	Coupon Issuance (A)	Check Issuance (B)	Coupon Issuance (C)	Check Issuance (D)	Savings (E=C-D)
Federal Government	0.51	0.00	1.28	0.515	0.765
State/County Government	1.54	1.03	0.77	0.515	0.255
Total	2.05	1.03	2.05	1.030	1.020

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

NOTE: The amounts shown under "Costs Paid" reflect federal sharing of 50 percent of costs incurred at the state and county levels.

It is likely that losses borne by food stamp clients declined under cash-out, because the FSP replaced checks that were lost or stolen before being endorsed and cashed, whereas the FSP will not replace lost or stolen coupons. In addition, check recipients were less likely to be subject to possible overcharging of food stamp recipients by some food retailers.

CONCLUSIONS

The potential impact of cash-out on the ability of the FSP to target its benefits specifically to food has been a central component of the policy debate about the desirability of this policy alternative. Opponents of cash-out have been concerned that issuing benefits in the form of checks would greatly weaken the program's impact on food use, whereas proponents have felt that the purchase of food would remain a high priority for recipients, even without the specific linkage to food purchases provided by coupons. Proponents have also argued that cash-out would lower the cost of administering the FSP and the cost of benefit losses.

The evidence from the Alabama Food Stamp Cash-Out Demonstration indicates that in

Alabama, cash-out did not result in lower expenditures for food or in reductions in the amount of nutrients provided by food used at home. The differences between check and coupon recipients in the mean values of these and other outcome variables are 3 percent or less and are mixed in sign. For none of the major outcome variables are the check-coupon differences in mean values statistically significant.

The impact of cash-out on the cost of administering the FSP is also relevant in assessing this policy alternative. We found that the cost of issuing benefits was 50 percent lower under check issuance than under coupon issuance. Costs incurred at the combined county and state levels declined, while costs incurred at the federal level were eliminated. Considering federal sharing of

VIII. INTRODUCTION TO VOLUME II

This volume is the second in a two-volume report on the evaluation of the Alabama Food Stamp Cash-Out Demonstration. Volume I, *Recipient Impacts*, focuses on the effects of cash-out on household food expenditures, food use, and nutrient availability. In addition, it considers a number of related issues, such as household experiences in running out of food, the attitudes of households toward cash-out, and the shifting of expenditures away from food to other goods and services. Volume II presents the administrative outcomes of the demonstration, covering the analysis of the implementation of the demonstration, and its effects on administrative costs and benefit losses. Volume II also presents the overall conclusions of the study and the appendices.

The form that benefits provided under the Food Stamp Program (FSP) should take has been an issue of long-standing debate. Supporters of the current issuance system argue that coupons are a direct and inexpensive way to ensure that food stamp benefits are used to purchase food and to minimize the unauthorized use of the benefits. Advocates of cash benefits argue that the coupon system is prone to abuse, limits the food-purchasing choices of recipients, places a stigma on program participation, and is cumbersome to administer. The need for research to better inform this policy debate has been recognized. Therefore, the Food and Nutrition Service (FNS) has in recent years approved four major demonstrations of the cashing-out of food stamp benefits. These demonstrations occurred, or are currently occurring, in Washington State, San Diego County, 12 "pure" cash-out counties in Alabama (the subject of this report), and 3 ASSETS counties in Alabama (in which households receive food stamps, Aid to Families with Dependent Children benefits, and energy assistance in one combined check). These sites vary substantially on a number of important dimensions, and the evaluations of these demonstrations are expected to shed light on a wide range of impacts of cash-out, in a variety of settings.

Volume I of this report presents findings that are based on data collected from approximately 1,200 households whose benefits were cashed-out, and from 1,200 households who continued to receive coupons during the Alabama Food Stamp Cash-Out Demonstration. The survey obtained detailed information on household composition and income receipt, and very extensive data on the foods used by each household during the week preceding the interview. In addition, respondents to the survey were asked about their attitudes toward and experiences with cash-out. To supplement the survey information, focus group discussions were held with FSP participants who had previously received their benefits as coupons, but whose benefit form had been converted to checks at the beginning of the demonstration.

This volume describes and documents the process of planning, implementing, and operating Alabama's Food Stamp Cash-Out Demonstration. Documenting the planning and implementation of the demonstration is important for two reasons. First, to facilitate our interpretation of the findings on the outcomes of the demonstration, we must understand the actual policy and procedural interventions that led to the observed outcomes. Second, if cash-out is ultimately implemented on a broader basis, the experience of Alabama officials in implementing cash-out can help officials in other localities who are planning for cash-out.

Volume II also presents estimates of the effects of cash-out on administrative costs of the FSP. Estimating the effects of cash-out on administrative costs, which are borne jointly by the state and federal governments, is important because a major impetus for cash-out is the belief that it will generate savings in this area. Administrative costs might be lower under cash-out because some steps in the coupon-issuance and redemption process are streamlined or eliminated under the cash-issuance system, thereby reducing costs to the federal and state governments. For example, under the check-issuance system, the costs to the federal government of printing coupons and shipping them to state agencies, and of authorizing and monitoring the participation of food retailers in the FSP, would be eliminated. In addition, several costs, which the state and federal governments share under

the current coupon system, would be eliminated or reduced; the costs of storing and transporting coupons would be eliminated, and the costs of issuing food stamp benefits to recipients would be substantially reduced due to the streamlined procedures for the preparation and mailing of benefit checks.

Another impetus for cash-out is the belief that it will reduce various forms of benefit loss, such as theft or loss during production, shipping, storage, or mailing; theft or loss of benefits after client receipt; and accidental overissuance. These types of loss lead to increased costs to the state and federal governments, and, hence, to taxpayers, as well. Volume II presents estimates of the impact of cash-out on such losses. Benefit loss might decline under cash-out, because cash issuance requires fewer steps and, consequently, provides fewer opportunities for theft and accidental overissuance. However, if, under cash-out, benefits are issued by mail rather than over-the-counter, losses might increase, because mail issuance is more vulnerable to loss.

Volume II also discusses other types of loss, which are borne by food stamp recipients, that might decline under cash-out. For example, food stamp checks that are lost or stolen after being received but before being cashed by the client can be replaced, whereas replacement coupons are not issued under similar circumstances. In addition, cash-out makes it more difficult to identify shoppers who are making purchases with food stamp benefits and, thus, it might reduce the possible overcharging of food stamp recipients by some food retailers.

Finally, Volume II discusses the overall conclusions of the study. It summarizes our findings on the impact of cash-out on recipients, including the differences between check and coupon recipients in the money value of food used at home, nutrient availability, perceptions of the adequacy of the household food supply, and household preferences about the form of the benefit. It also summarizes our findings on the impact of cash-out on administrative costs and benefit losses, as well as lessons learned from planning and implementing the demonstration.

This volume is organized as follows. Chapter IX describes the data and methods used in the analysis of administrative outcomes. Chapter X discusses the planning, implementation, and operation of the Alabama Food Stamp Cash-Out Demonstration. Chapter XI analyzes the impact of cash-out on administrative costs, and Chapter XII analyzes its impact on issuance-system loss. Finally, Chapter XIII presents the conclusions from the analysis of administrative outcomes, as well as overall conclusions from the study. Appendices present technical methodological discussions and supporting information about the demonstration.

IX. DATA AND METHODS FOR THE ANALYSIS OF ADMINISTRATIVE OUTCOMES

This chapter describes the data and analytic methods used in the analysis of the administrative outcomes of the Alabama Food Stamp Cash-Out Demonstration. For each component of the analysis, we discuss the research questions, the variables that we analyze, the data sources and collection methods, and the analytic techniques. Section A covers the analysis of the planning and implementation of the demonstration; Section B covers the analysis of administrative costs, as well as the planning and implementation costs; and Section C covers the analysis of benefit losses.

A. THE IMPLEMENTATION ANALYSIS

We present the implementation analysis in Chapter X. The objectives of the analysis are to describe the planning and implementation steps undertaken, examine what worked well and what was trouble-prone in terms of delays and unexpected drains on resources, and compare the coupon- and check-issuance procedures. (The data and methods used to estimate costs, including the planning and implementation costs and the administrative costs of coupon and check issuance, are covered in Section B.)

1. Research Questions

Key research questions associated with the implementation analysis include:

- What tasks were involved in planning and implementing the demonstration?
- What difficulties arose in planning and implementation? How were they resolved?
- What factors were most important in successfully implementing the demonstration?
- How did the check-issuance procedures in the demonstration differ from the existing coupon-issuance procedures?

2. Data Collection and Analysis

The data sources for the implementation analysis are on-site and telephone interviews of county and state food stamp staff, and telephone interviews with representatives of advocacy groups.[1] The interviews were based on structured protocols to ensure that all of the salient information was obtained on a comparable basis from each interview respondent. Findings from the interviews were supplemented with information obtained from reports and other material, including Alabama Welfare Commission reports, Alabama's Administrative Procedures Act, and the Administrative Letters from the Commissioner of the Alabama Department of Human Resources (DHR) to the county DHR directors describing the cash-out demonstration and various procedures for its operation.

Our analysis yields largely narrative descriptions of the planning and implementation processes and the issuance procedures. We present a tabular comparison of the functions and tasks for food stamp issuance under the coupon- and check-issuance systems.

a. County Interviews

We conducted interviews with county-level staff during site visits to eight demonstration county food stamp offices in June and July of 1990, including the two urban cash-out counties (Jefferson and Montgomery) and six rural counties (Clay, Conecuh, Dale, Dekalb, Fayette, and Lauderdale).[2] In each office, we interviewed an issuance receptionist and/or cashier, and the program director and/or issuance supervisor; in most offices, we also interviewed certification and/or eligibility workers.[3] In

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[1]In addition to obtaining information on the planning and implementation of cash-out, we used the interviews with county and state staff to obtain data on the administrative costs of coupon and cash issuance, the costs of implementing the cash-out demonstration, and the impact of cash-out on the vulnerabilities of benefits to losses, described in Sections B and C.

[2]Four rural cash-out counties--Choctaw, Dallas, Marion, and Pickens--were not visited. On the basis of the site visits to the other six rural cash-out counties, we judged that issuance procedures varied only slightly among the rural counties, and that findings from the six visited rural counties could be generalized to the four unvisited counties.

[3]In Alabama, "certification worker" refers to caseworkers who handle food stamp applications, and "eligibility worker" refers to caseworkers who handle Aid to Families with Dependent Children (continued...)

these interviews, we obtained information on the activities associated with the implementation of cash-out, such as the training of staff and the testing of automated procedures, as well as coupon- and check-issuance procedures. In addition to the on-site interviews, we conducted follow-up telephone interviews with county staff in November of 1990 in order to obtain additional information on problem resolution and on the staff's experience with cash-out in the first six months of the demonstration.

b. State Interviews

At the state level, we interviewed staff during June of 1990 in the Food Stamp Division, Information Systems Division, and Data Systems Management Division of the DHR. These staff described the origin of the demonstration, the timing of planning and implementation activities, the gains expected from cash-out, problems that had to be resolved, the garnering of support for food stamp cash-out in Alabama, and the costs associated with implementing the cash-out demonstration.

c. Interviews with Advocacy Groups and Trade Organizations

To obtain a variety of viewpoints on the cash-out demonstration, in November of 1990, we interviewed representatives of the Alabama Legal Services Corporation, the Alabama Retail Merchants Association, and the Alabama Coalition Against Hunger. The purpose of the interviews with advocacy groups was to discuss their roles in the implementation of cash-out, their support or opposition to cash-out, the reasons for their support or opposition, their perceptions of the advantages and disadvantages of cash-out for food stamp recipients and for the Food Stamp Program (FSP), and their constituencies' experiences with cash-out.

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[3](...continued)
(AFDC) applications, including joint AFDC and food stamp applications. Thus, the certification workers resolve food stamp issuance problems for households receiving food stamps but not receiving AFDC, and the eligibility workers resolve food stamp issuance problems for households receiving both food stamps and AFDC.

B. THE ANALYSIS OF ADMINISTRATIVE COSTS

We present the analysis of administrative costs in Chapter XI. The objectives of the analysis are to document and compare the state and federal costs of issuing food stamp benefits by coupon and by check, as well as to estimate the costs of implementing the cash-out demonstration. We identified two hypotheses to be tested in the study of administrative costs. The first is that reduced issuance costs at the county level more than offset higher costs at the state level, to produce a net savings associated with check-issuance relative to coupon-issuance. The second is that the total federal costs of administering the FSP are lower under the check-based system than under the coupon-based system.

1. Research Questions

Key research questions associated with the analysis of administrative costs include:

- What are the costs of issuing coupons and issuing checks, by level of government at which they are incurred?
- Does switching from coupons to checks reduce benefit-issuance costs?
- What are the amounts of these savings, by issuance function?
- To the extent that check issuance reduces costs, what savings accrue to the state and local levels, and what savings accrue to the federal government?
- What were the costs (for example, labor and fringe benefits) for check-issuance system design, development, and implementation for the Alabama Cash-Out Demonstration?

2. Data Collection and Analysis

The sources for the issuance cost data are on-site interviews with county FSP staff, described in Section A.2; a mail survey of certification and eligibility workers about issuance problems; on-site interviews with state FSP staff; and federal cost estimates provided by Kirlin et al. (1990).

a. County Interviews

In the interviews with county staff during June and July of 1990, we obtained detailed information on the procedures for over-the-counter and mail issuance of coupon benefits, including the time spent by each staff member and the nonlabor resources used in both types of issuance.

b. Mail Survey

In November of 1990, we conducted a mail survey of eligibility and certification workers. This survey contained questions about workers' experiences with check-issuance problems during the demonstration, including questions about the types of problems encountered, how those problems were resolved, and how much time was spent resolving the problems. The one-page instrument was sent to each of the 87 certification and eligibility workers in the 12 demonstration counties who had dealt with one or more check-issuance problems. It specifically requested information on each of the 152 check-issuance problems that were officially recorded during the period of May through October of 1990.[4] Appendix L contains a copy of the instrument.

c. State Interviews

To obtain estimates of implementation and issuance costs at the state level, we interviewed staff in the following offices during June of 1990:

- DHR's Information Systems Division, which designed and tested the software for the demonstration, oversaw the computer processing for check issuance, and produced computer reports on food stamp check and coupon issuances
- DHR's Data Systems Management Division, which ran the computer programs to generate files of participants and benefit amounts for the mail issuance of checks
- The Comptroller's Office, which used the files generated by the Data Systems Management Division to produce the checks

[4]The response rate was 100 percent. For the certification and eligibility workers who were unavailable or unable to respond, the supervisors obtained the necessary information and completed the survey instrument.

- The Treasurer's Office, which received, reconciled, and maintained the canceled food stamp checks
- The Food Stamp Accounting Office within DHR's Fiscal Administration Division, which oversaw and monitored the check-issuance system and processed food stamp checks returned in the mail, and which aggregates and reports coupon- and check-issuance data for the Food and Nutrition Service and handles the authorization, storage, delivery, reconciliation, and monitoring of coupons

d. Data Analysis

The interviews with state- and county-level staff obtained information on the amount of time spent by each staff person on coupon issuance and on check issuance. We computed labor costs by multiplying the amount of time that each staff person spent on issuance tasks by the wage and fringe benefit rates specific to the positions occupied by those persons. From knowledgeable county-level and state-level staff, we also obtained information about the nonlabor costs of benefit issuance, such as postage, storage, transportation, security, and insurance. For federal costs, we updated the 1988 estimates provided by Kirlin et al. (1990) to 1990 by using the fixed-weight price index.[5] To obtain total costs of issuance, we added together all relevant labor and nonlabor costs.

We examined issuance costs on a "per-case-month" basis, which is a common means of comparison for FSP costs (see, for example, Abt Associates, Inc., 1987). Per-case-month costs are obtained by dividing a monthly cost by the monthly food stamp caseload; thus, we can compare costs for caseloads of different sizes. Appendix M presents a more detailed discussion of the methods that we used to estimate issuance costs.

Similarly, to estimate the costs of implementing the Alabama Cash-Out Demonstration, we computed the labor and nonlabor costs of planning for the demonstration, developing the software and the procedures for operating cash-out, and training the staff. These costs were added together to produce a total estimated implementation cost.

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[5]From 1988 to 1990, according to the *Survey of Current Business*, 1990 and 1991, the fixed-weight price index for federal nondefense purchases of goods and services increased 8.1 percent.

C. THE ANALYSIS OF BENEFIT LOSSES

We present the analysis of benefit losses in Chapter XII. Benefit losses result from theft during production, shipping, storage, or mailing, or from clients after receipt; overissuance; and the use of benefits in an unintended manner, such as selling coupons for cash (trafficking), purchasing ineligible items, or spending cash change from coupon purchases on ineligible items. The objective of the analysis of benefit losses is to compare the amount of loss under coupon issuance and check issuance, both as a percentage of total issuance and on a dollars-per-case-month basis. We make comparisons within categories of vulnerabilities. In addition, we report in a narrative format findings from discussions with food stamp workers and clients about the impact of check issuance on losses.

1. Research Questions

Key research questions associated with the analysis of the effect on losses include:

- Does switching from coupon issuance to check issuance reduce the incidence or the amount of benefit loss?
- To the extent that benefit losses are reduced, what specific areas of system vulnerability are reduced?
- Did any new forms of fraud emerge under cash-out?

2. Data Collection and Analysis

The primary sources of information on coupon benefits that are lost or stolen in the mail and on benefits that are lost from coupon inventories are the monthly FNS-46 and FNS-250 reports and the quarterly FNS-259 report, which are submitted by each Alabama county to the state Food Stamp Accounting Office. We obtained copies of these reports from the Food Stamp Accounting Office. We obtained corresponding information on check issuance from the FNS-46 and FNS-250 reports and supplemented the information with data compiled by the state Food Stamp Division.

Direct data on the other sources of benefit loss in Alabama are not available; however, we obtained limited information from the interviews with food stamp staff, described in Section A.2, and from the focus group discussions with clients, described by Mazur and Ciemnecki (1991).

We present tables comparing (1) the vulnerabilities to loss under coupon and check issuance, (2) the average monthly value of overissuance and loss from coupon inventories in the demonstration counties during the demonstration period (May through December of 1990), and (3) mail losses under coupon and check issuance in the demonstration counties during the demonstration period. We also examine who bore the losses, and how that changed under cash-out. Finally, we present a narrative discussion of the loss of benefits after client receipt.

X. THE PLANNING, IMPLEMENTATION, AND OPERATION OF ALABAMA'S FOOD STAMP CASH-OUT DEMONSTRATION

This chapter describes the process of planning and implementing Alabama's cash-out demonstration, and the operation of Alabama's coupon-issuance and check-issuance systems. The data sources include on-site and telephone interviews of county-level and state-level food stamp staff, telephone interviews with representatives of advocacy groups, and documents produced by state staff. (We describe the interviews with county-level and state-level food stamp staff in greater detail in Chapter IX.) Analyzing the process of planning, implementing, and operating cash-out in Alabama aids in understanding the impact of the demonstration on recipient behavior, administrative costs, and losses. The process analysis also aids in assessing the degree to which the Alabama experience can be generalized, and the potential use of the demonstration experience in future federal policy development.

The next section of this chapter discusses planning for cash-out. Section B covers its implementation, and Section C describes operational differences between the coupon- and check-issuance systems in Alabama.

A. PLANNING FOR CASH-OUT

Food stamp cash-out in Alabama has been closely tied to other welfare reform plans. The idea for the Alabama cash-out demonstration arose from the welfare reform efforts of the 1980s, spurred by federal encouragement of state initiatives to make the welfare system more effective and efficient.

This section describes the origin of the demonstration, the timing of planning activities, the potential gains that were the impetus for cash-out, problems that had to be resolved, and the garnering of support for food stamp cash-out in Alabama.

Table of Contents

1. The Origin of the Alabama Cash-Out Demonstration

The roots of Alabama's cash-out demonstration lie in calls for welfare reform that had been made by the Republican candidate, Guy Hunt, during the 1986 Alabama gubernatorial campaign. Hunt, who became Alabama's first Republican governor in 125 years, campaigned with a promise to reform welfare and to "put people to work." At a meeting of the state Board of Human Resources in March of 1987, shortly after taking office, Governor Hunt reaffirmed his interest in welfare reform.[1] That autumn, the Governor appointed a Welfare Reform Commission to study welfare in Alabama and to make recommendations for its reform.

In Alabama, state welfare activities are the responsibility of the Department of Human Resources (DHR). The commissioner of DHR during the development and implementation of cash-out was Andrew P. Hornsby, Jr. Governor Hunt placed responsibility for the coordination of his welfare reform initiative in the hands of Commissioner Hornsby, who acted quickly. In the spring of 1987, Commissioner Hornsby called a meeting of the entire staff of DHR and began laying the groundwork for reforming Alabama's welfare system by promoting the ideas of combining welfare programs and of providing food stamp benefits in the form of checks, rather than coupons.

Concurrently, support for welfare reform was coming from the federal level. In July of 1987

caseload. Officials at FNS were concerned that, because California's Aid to Families with Dependent Children (AFDC) payments are relatively generous, and the average food stamp benefit is, consequently, relatively small, examining cash-out only in California could lead to misleading results about the impacts of cash-out on food purchases made by program participants.

When Alabama, a state with relatively low AFDC payments, went to the LIOB with a welfare reform proposal to combine welfare programs, officials in the United States Department of Agriculture (USDA) conceived of the idea of a "pure" food stamp cash-out demonstration in that state. John Bode, Assistant Secretary for Food and Consumer Services, USDA, opened discussions with Commissioner Hornsby, the outcome of which was an agreement that FNS would support Alabama's welfare reform demonstration if Alabama would also conduct a pure food stamp cash-out demonstration. The two Alabama demonstrations came to be known as "ASSETS" (Avenues of Self Sufficiency through Employment Training) and "pure cash-out." In the ASSETS Demonstration, AFDC, food stamps, and the Low Income Home Energy Assistance Program (LIHEAP) were merged into a single program on a county-wide basis in three counties; thus, food stamp cash-out was one component of ASSETS. In the pure cash-out demonstration, which had no broader welfare reform objectives, food stamp benefits were provided as checks for a small sample of food stamp recipients in selected non-ASSETS counties. Many of the planning and implementation activities for the two demonstrations were performed jointly, in particular, the extensive development of the necessary computer software. Garnering support among staff, clients, and the public was also a joint effort.

The Public Assistance Division of Alabama's DHR designed and implemented ASSETS, whereas the Food Stamp Division handled cash-out, when the planning and implementation of cash-out were separate from ASSETS. Both divisions report to the DHR Deputy Commissioner for Programs, who reported directly to DHR's Commissioner Hornsby. The Food Stamp Division is responsible for food stamp policy, consultation, training, and certification; food stamp employment and training programs

are handled by the Public Assistance Division. Figure X.1 shows an organization chart of the Alabama DHR, and Figure X.2 shows an organization chart of the Food Stamp Division.

2. The Nature and Timing of Planning Activities

Alabama's Welfare Reform Commission began meeting in late 1987. The Commission, which was chaired by David Owens, the Director of the Public Assistance Division of DHR, was comprised of representatives of advocacy groups, clients, social welfare agencies, state officials, business and industry, and churches, as well as other concerned persons. In April of 1988, the Commission published a report entitled *The Alabama Welfare Reform Vision: A Report to the Governor*. This report described Alabama's welfare system, pointed out its weaknesses, and advocated a demonstration that would merge AFDC, food stamps, and LIHEAP into a single program. In this context, the report recommended cashing out food stamps, stating that:

> ". . . providing assistance to clients in the form of in-kind benefits such as food stamps overtly implies that they cannot independently manage their own lives and household budgets. Providing merged benefits in the form of cash assistance to meet basic needs stresses independence skills."

The report also described and suggested strategies for eliminating long-term welfare dependency. These strategies included improved child-support enforcement, comprehensive employment and training programs, statewide public awareness campaigns to inform people about poverty in Alabama and to obtain support for funding and legislative programs, and encouragement of county initiatives and demonstrations. Governor Hunt publicly expressed support for the Commission's proposals.

In September of 1988, the Commission issued a second, shorter report, entitled *Welfare in Alabama and the Need for Change*. This report highlighted the findings and recommendations of the earlier report and included photographs showing the living conditions of welfare recipients in Alabama. Both reports called for welfare reform demonstrations that would be comprehensively evaluated and, if unsuccessful in improving the welfare system, discontinued.

FIGURE X.1
ALABAMA DEPARTMENT OF HUMAN RESOURCES

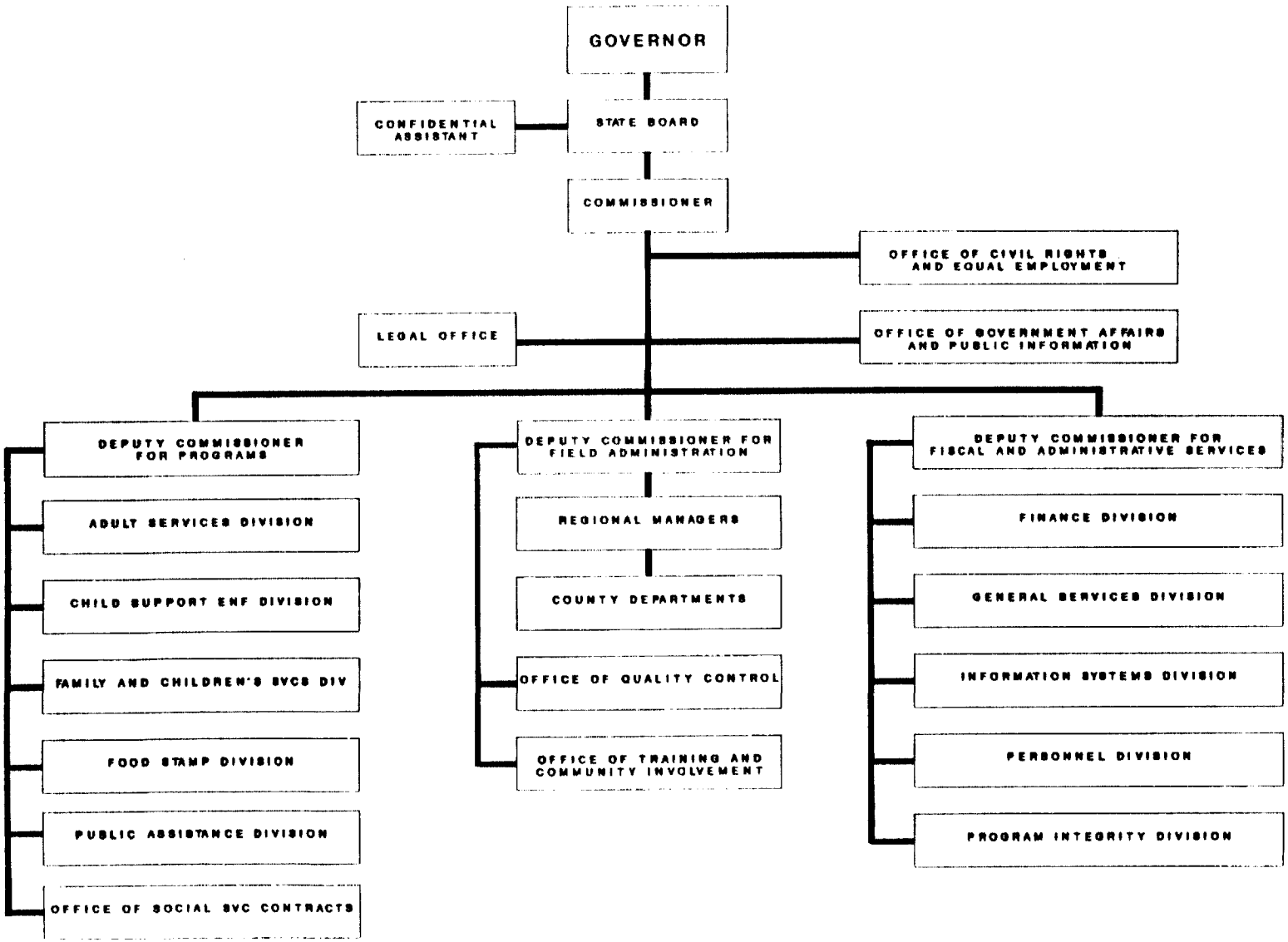
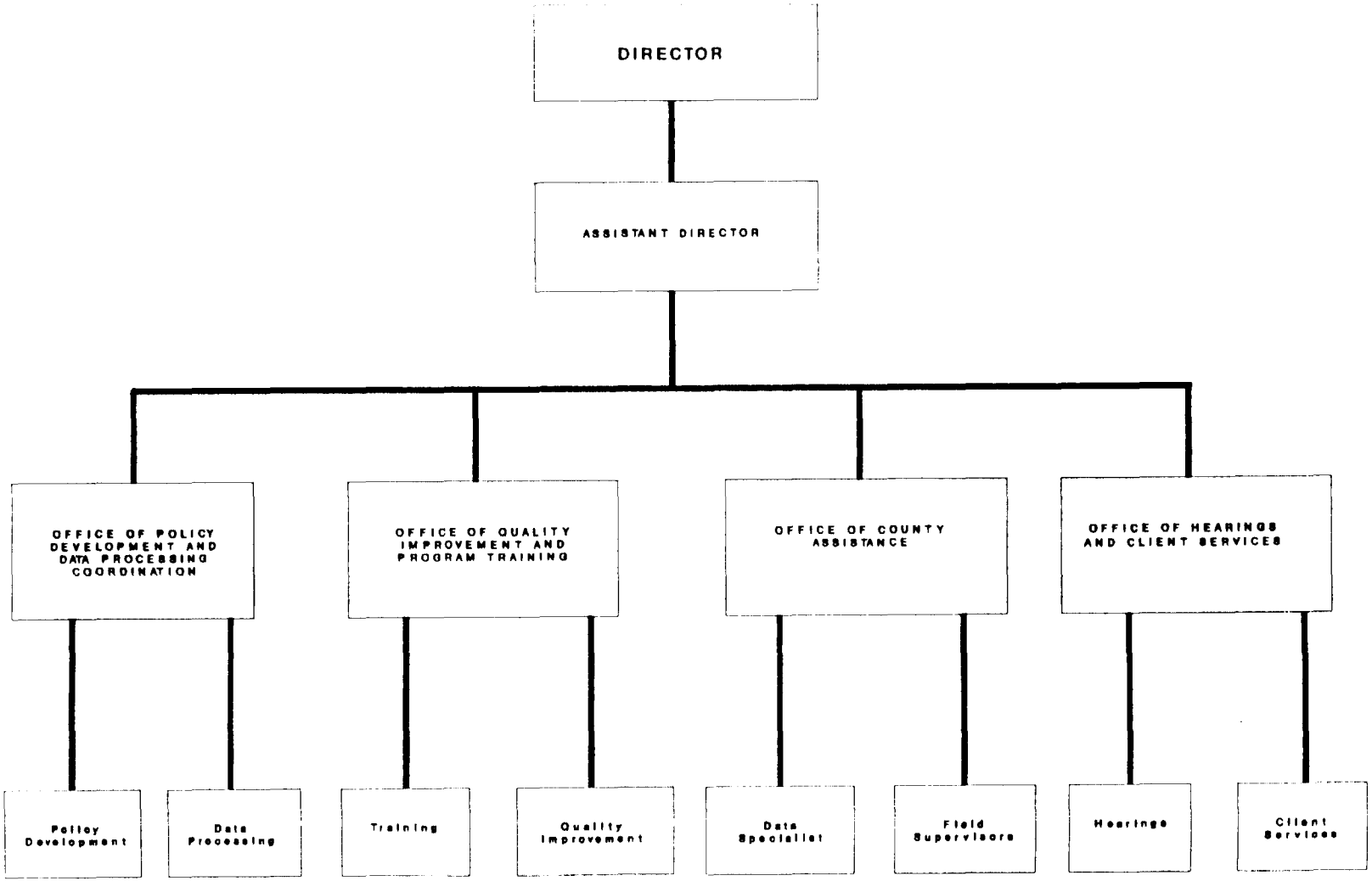


FIGURE X.2
FOOD STAMP DIVISION



Alabama worked closely with FNS to lay the groundwork for the food stamp components of both the ASSETS and the pure cash-out demonstrations. FNS and DHR staff met in Montgomery in the summer of 1988; as an outcome of that meeting, Alabama officially proposed a pure cash-out demonstration to FNS. FNS approved the demonstration and agreed to pay 100 percent of the evaluation costs and to prepare the waiver materials.

Alabama staff recognized early in the planning process that the automation aspects of ASSETS and cash-out would be major challenges in implementing the two demonstrations. Therefore, an automation committee was formed, consisting of the DHR Cash-Out Project Manager, the Acting Director of the Food Stamp Division, a staff member from the Office of County Assistance of the Food Stamp Division, and a systems analyst consultant who was hired to develop the software for ASSETS and cash-out. The automation committee played an active role in developing and implementing cash-out's software and automated procedures.

Another planning activity for cash-out was the formal revision of the state's administrative regulations governing food stamps. Food stamp issuance procedures are spelled out in Alabama's Administrative Procedures Act. Before cash-out could be implemented, the act had to be revised to allow for the issuance of state warrants, rather than coupons, for the cash-out households.

3. Key Issues

Several issues had to be resolved before the food stamp cash-out demonstration could be implemented in Alabama. A major problem concerned state and local sales taxes on grocery items. Alabama imposes a 4 percent tax on grocery sales, and counties and municipalities impose additional sales taxes ranging from 2 percent to 4 percent. By federal law, purchases made with food stamps are exempt from these taxes, but those made with check benefits (because they are cash purchases) are taxed. To offset the sales tax, DHR increased the amount of each food stamp check by 7

percent.[2] DHR's budget was the source of funding for the benefit increase; however, all taxes collected as a consequence of purchases made by check recipients went into the state's general operating fund or to local governments. This treatment of sales taxes heightened DHR's sensitivity to the scale and duration of the cash-out demonstration.

Another issue that was not a problem under coupon issuance involved the funding of check benefits, that is, how the Food Stamp Program (FSP) would repay Alabama for the food stamp benefits that were paid to clients in the form of state vouchers. This issue was resolved through the use of letters of credit, by which the FNS Southeast Regional Office in Atlanta electronically credited the State of Alabama's bank account.

Concern that clients would have difficulty cashing the food stamp checks arose when a representative of a major Alabama grocery chain raised the possibility of grocery stores charging fees to cover their administrative costs of cashing checks, especially the cost of accepting checks with fraudulent client signatures. However, state food stamp staff informed the retailers that clients would be required to present a second piece of identification, in addition to the food stamp identification card, so that retailers would be able to compare signatures and prevent the fraudulent use of benefits.

4. Garnering the Support of Staff, Clients, and Other Groups

Given the widespread acceptance of food benefits in the form of coupons, Commissioner Hornsby and others interested in welfare reform knew that a great deal of public education would be required to build support for cash-out. Consequently, the state began to undertake a large public relations effort. When Commissioner Hornsby first came to DHR, he advocated that a cash-out demonstration be conducted on a small scale. He told the county DHR directors that both welfare reform and some form of cash-out were going to be implemented, and he instructed the directors to

[2]Initially, DHR had proposed to augment food stamp benefit amounts by 6 percent to offset the sales tax, because the statewide average of cumulative state and local sales tax rates was 6 percent. However, in some counties the cumulative sales tax rate was higher (in Montgomery County, it was 8 percent). Ultimately, DHR adopted a 7 percent sales tax offset.

build local support for both ideas. Accordingly, during the winter of 1988, in ten of the state's most populous counties, the county DHR directors held legislative hearings that were open to all persons interested in the state's welfare system. Increased political support for welfare reform and cash-out, as well as for an increase in AFDC benefits, resulted from the meetings. In addition, Commissioner Hornsby held a hearing for state legislators on the issues of welfare reform and cash-out. Subsequently, the legislators enacted legislation that increased the state's budget for AFDC by 5 percent.

Enlisting the support of county-level food stamp staff was crucial in implementing any welfare reform. The Acting Director of the Food Stamp Division, Terrie Reid, attended a meeting of the Alabama Association of Food Stamp Supervisors and Administrators to explain cash-out and ASSETS and to enlist support for these programs. She suggested that they maintain records of comments and feedback from clients, food retailers, and the community about these welfare reform initiatives.

Federal regulations preclude that cash food benefits be counted as income for the purpose of determining eligibility for such means-tested public assistance as public housing. Before cash-out was implemented, DHR sponsored a statewide meeting of approximately 100 officials who operated public housing programs in Alabama, during which cash-out and the exclusion of check benefits from the counting of income were explained. Several members of that group subsequently met in Montgomery with staff from the Food Stamp and Public Assistance Divisions to obtain additional information on cash-out and ASSETS.

Retail food merchants opposed cash-out. Charles McDonald, the Executive Director of the Alabama Retail Merchants Association, was appointed to the Welfare Reform Commission in order to obtain his involvement and support for cash-out. Commissioner Hornsby and the Directors of the Food Stamp and Public Assistance Divisions met with the association late in 1989, at which time the retailers expressed cautious support for the Commissioner, but also expressed serious reservations about cash-out. Their main objection was their fear that check recipients would use check benefits

to buy nonfood items, and that, as a result, grocery retailers would lose business. After this meeting, but before cash-out was implemented, a large informational meeting was held in Huntsville (which is in Madison County, one of the three ASSETS counties) for retailers who accepted food stamps. During that meeting, the retailers expressed their reservations, and Commissioner Hornsby argued his case. In addition, in response to the request of the Retail Merchants Association for information, DHR sent the association a supply of brochures providing information on ASSETS and cash-out. In the words of Acting Food Stamp Division Director Terrie Reid, "So much groundwork was laid with the retailers that when cash-out finally happened, it was anti-climactic" (interview in Montgomery, Alabama, on June 20, 1990).

Two advocacy groups for low-income persons, the Alabama Coalition Against Hunger and the Alabama Legal Services Corporation, also expressed opposition to cash-out, but for reasons very different from those of the retailers. The groups' first concern was that financial pressures on food stamp recipients would make it extremely difficult for the recipients to use the check benefits to purchase food only. The groups felt that Alabama's low AFDC benefits exacerbated the financial pressures, because low AFDC benefits mean that food benefits constitute a large proportion of the total income of many food stamp recipients. The groups also felt that the pressures were exacerbated by the scarcity of public housing, which increases the pressure on food stamp recipients to use their food benefits to cover housing costs. The Alabama Coalition Against Hunger and the Alabama Legal Services Corporation were also concerned about the possible exploitation of recipients of food stamp checks. For example, landlords might raise rents if they knew that their tenants had more cash available, or sales people might pressure check recipients to spend their benefits on nonfood items. The position of the Alabama Coalition Against Hunger was that cash-out is not a bad idea in theory, but that, before cashing out food stamps, the state should increase its maximum AFDC grants to the average of the East South Central states and should institute a General Assistance (GA) program. The coalition felt that these changes would reduce the likelihood of cash food benefits being spent

on nonfood items. The coalition was also concerned that full cash-out of Alabama's food stamp caseload would mask the inadequacy of the state's welfare system, and would make it more difficult for advocacy groups to lobby the legislature to increase maximum AFDC grants or to implement GA. The coalition reported that its food stamp clients were opposed to cash-out because of concerns about how other food stamp recipients might spend their check benefits.

The second concern was that food assistance in the form of check benefits would be controversial and politically vulnerable, whereas coupons had strong Congressional and public support. Legal Services Director Larry Gardella expressed concern that food stamp benefits in the form of checks would be much more likely to be "tampered with" by the Congress. The groups also were concerned about any change in the basic structure of the FSP. In the words of Carol Gundlach, of the Alabama Coalition Against Hunger (telephone interview, November 14, 1990):

> "I have fears that we're looking at a defederalization of the Food Stamp Program. What scares me is that we may end up with fifty different Food Stamp Programs; the program's strength is its consistency across all the states. Cash-out gives too much control in setting policy to states who won't build in the protections the Food Stamp Program has built in."

B. IMPLEMENTATION OF CASH-OUT

Cash-out required major efforts to develop the automated system and procedures. However, the human aspects of implementation (training staff and notifying clients) were also important. This section describes the implementation and evaluation schedule, the design of procedures and systems, the training of staff, the notification of clients, the reactions of staff, and the lessons learned.

1. The Implementation and Evaluation Schedule

The original schedule for the pure food stamp cash-out demonstration accommodated the data collection requirements of the demonstration evaluation while recognizing the need of DHR to limit its cost of the demonstration and to coordinate the pure cash-out and ASSETS demonstrations. The schedule called for pure cash-out to be conducted in three consecutive, four-month phases in calendar

year 1990. Phase One (initial implementation) was scheduled to begin in January with the issuance of checks to approximately 1,850 randomly selected households in two urban and ten rural counties. Phase Two (data collection) was to begin in May and to end in August, thus giving check recipients four to eight months to adjust their consumption behavior to the new form of benefits before being interviewed. During this phase, detailed data on food use over a one-week period were to be collected from 1,200 randomly selected check recipients and 1,200 randomly selected coupon recipients. Phase Three (demonstration close-down) was to begin with the completion of data collection and to continue through the end of the year.

Two delays in the implementation of the demonstration necessitated that the period of check issuance be reduced from the planned 12 months to 8 months. Pure cash-out had always been closely linked to the ASSETS Demonstration. By December of 1989, it had become apparent that the design of ASSETS, most notably the design of the check-issuance software, was behind schedule. Consequently, DHR decided to delay the start of ASSETS by three months. Because the pure cash-out demonstration and ASSETS required essentially the same software, DHR also chose to delay the cash-out demonstration until April of 1990. By March of 1990, the check-issuance software was available, but had not been tested fully; therefore, DHR chose to delay the start of pure cash-out by one additional month.

DHR and FNS agreed to accommodate the delays in the implementation of cash-out, but to maintain the original calendar year 1990 time frame for the demonstration, by reducing the duration of each of the three phases of the demonstration. According to the revised schedule, Phase One was to last three months, Phase Two was to last three and one-half months, and Phase Three was to last one and one-half months.

The revised schedule satisfied FNS's three principal requirements for the timing of the demonstration, which were as follows:

1. Phase One must be of sufficient duration to permit the food-use behavior of check recipients to stabilize in response to the new form of benefit. FNS considered three months to be the minimum acceptable duration of Phase One.

2. Phase Two must be of sufficient duration to permit food-use data to be collected from 2,400 households.

3. Household data collection must not extend into the Thanksgiving to New Year holiday period, when unusual food-use patterns are more likely to be reported.

In addition, the revised schedule was responsive to DHR's concern that it have sufficient time to provide check recipients with one month's advance notification of the reversion to coupon issuance. Furthermore, because the cash-out checks included 7 percent higher benefits as an offset to the sales tax on food, with the increase in funds coming from DHR's budget, the agency was anxious to minimize the number of months during which check issuances were made. The revised, eight-month schedule was responsive to the latter need.

The pure cash-out demonstration was successfully implemented according to the revised schedule. The issuance of food stamp benefits in the form of checks began on May 1, 1990, and ended on December 31, 1990. Household data collection began on August 3, 1990, and was completed on November 17, 1990.

2. Designing and Implementing Procedures and Systems

Writing the software programs to handle check issuances and working out the automated procedures for producing checks comprised the major part of the design of the cash-out system. The software for cash-out was taken from the check-writing system being developed for ASSETS, modified to handle food stamp cases only, and entered into Alabama's automated food stamp client data system, SCI-II (State and County Integrated System).

In SCI-II, 150 subroutines deal with food stamps. Each modification required by cash-out necessitated identifying which subroutines had to be modified, and then writing and testing the modifications. Both on-line processing programs and batch-payroll processing programs had to be modified. Some of the necessary modifications were: (1) changing the master file by modifying the existing issuance-type field to include check issuance, (2) changing the supplemental issuance and reconciliation procedures to include check-issuance cases, and (3) changing the case-information profile to provide separate listings for the coupon and check systems, so that separate totals could be obtained for the two types of issuance. Some problems, such as the sequencing of several activities (for example, designating an alternate payee when the original payee became incapacitated or died), were more complex under cash-out than under coupon issuance.

Once the software procedures were in place, the procedures for county-level workers were detailed in an Administrative Letter from Commissioner Hornsby to the county DHR directors. This letter described the cash-out demonstration and its evaluation; specified standards for certification, issuance, and benefit levels; and described the procedures for handling check-issuance problems (such as processing returned warrants, authorizing replacement warrants, and issuing special payments).

3. Interfacing with Other State Agencies

Cash-out also required interfaces with two state agencies (the Treasurer's and Comptroller's Offices) that had not been involved in food stamp issuance, and whose priorities sometimes differed from those of the Food Stamp Division. For example, a request was made to the Treasurer's Office to set up procedures allowing county workers to have on-line access to a file indicating whether, or when, a food stamp check had been cashed. However, this procedure was never set up. In addition, the Food Stamp Division had disagreements with the Comptroller's Office about the priority accorded to the issuance of food stamp checks; although the FSP requires that benefits be issued within a certain time frame, the Comptroller's Office occasionally scheduled non-food stamp functions before food stamp checks, thus delaying the issuance of the checks.

4. Staff Training

One DHR staff member was designated the Cash-Out Trainer and worked full time on cash-out, from January of 1990 through its phase-out. This member's duties included preparing training materials, conducting training sessions, and ensuring that all county staff were well prepared, so that the cash-out implementation would go smoothly. After implementation, the Cash-Out Trainer handled operational questions from the counties. County-level staff were trained on-site in some of the cash-out counties, as well as in Montgomery and Birmingham. A total of 350 county-level and state-level staff received training. County DHR directors, program supervisors, issuance supervisors, food stamp receptionists, food stamp cashiers, telephone receptionists, and clerical workers received training appropriate to their level of involvement with cash-out. In addition, state-level food stamp and finance administration staff received training. The training schedule was as follows:

- February 1990--orientation for county directors and program supervisors
- February 1990--on-site training about cash-out for county issuance staff
- March 1990--orientation for other county staff
- April 1990--update training for county staff
- April 1990--training for state staff
- May 1990--meeting of program supervisors about cash-out implementation

5. Notification of Clients

Once the initial sample of cash-out households was chosen, those households had to be notified about their selection. The county DHR offices sent letters to all cash-out households explaining cash-out and describing the checks that they would be receiving. An informational pamphlet was enclosed with the letters. Letters sent to the initial sample households and letters sent to the supplemental households (households added to the cash-out sample after the initial sample was drawn, to

compensate for attrition from the demonstration) contained basically the same information, but were worded slightly differently. Copies of the letters and of the pamphlet are shown in Appendix K.

6. Reactions of County Staff

County workers who were interviewed for the evaluation stated almost unanimously that cash-out implementation had gone smoothly, and that they and the clients had been well prepared. According to the workers, most clients liked check issuance, and a number of clients receiving coupons had expressed a desire to receive checks. Workers mentioned less stigma, more dignity and self-determination, and the convenience of mail issuance as advantages of check issuance to the clients. Most workers cited lower issuance costs as an advantage of cash-out to the FSP. Workers mentioned the possibility of clients using the check allotments to purchase nonfood items as both an advantage and a disadvantage. The advantage stemmed from the freedom to use the money to purchase nonfood items, when necessary; the disadvantage stemmed from the loss of budgeting assistance due to the constrained nature of coupons and, consequently, the higher likelihood that clients might run out of food. After cash-out was implemented, the county offices received very little feedback from the public, food retailers, or advocacy groups.

7. Lessons Learned

Developing the automated systems to handle check households and issue food stamp checks absorbed a large amount of resources and required more time than was originally anticipated. According to the consultant responsible for software development for ASSETS and pure cash-out

changed to fit the needs of the evaluation, thus adding to the labor costs and time requirements of the systems' development efforts.

With the exception of the development of automated systems, cash-out implementation went very smoothly. A large factor in the ease with which cash-out was implemented was the training provided by DHR to its county and state staff. After implementation, the Cash-Out Trainer worked full-time to ensure that cash-out ran smoothly, which entailed being available to answer all questions from the county offices and serving as a liaison between food stamp staff and automated systems staff. Having a full-time person in that position appeared to be a key reason that implementation and operations went smoothly.

Another factor underlying the ease of implementation of cash-out was the extensive public relations effort conducted by DHR staff, which began at the earliest date possible. Commissioner Hornsby systematically laid the groundwork for cash-out by involving and informing all interested parties. He built support through personal contact and promotion of welfare reform among state workers, retailers, legislators, county DHR directors, and other concerned persons. Other DHR staff prepared the clients for cash-out and followed up on Commissioner Hornsby's campaign of educating other agencies and the public about cash benefits.

C. OPERATIONAL DIFFERENCES BETWEEN COUPON AND CHECK ISSUANCE IN ALABAMA

The procedures and resources required for coupon and check issuance differ substantially. Describing those differences provides a context for analyzing differences in issuance costs and the impact of cash-out on benefit losses and diversions. This section describes the administration of the FSP in Alabama, the procedures for coupon and check issuance, and the differences in the types of resources required for the two systems. Table X.1 gives an overview of the steps necessary to issue coupons, checks, or both forms of benefits.

TABLE X.1

FUNCTIONS AND TASKS FOR FOOD STAMP BENEFIT ISSUANCE SYSTEMS IN ALABAMA

Function/Task	Coupons Only	Checks Only	Both Systems
Authorizing Recipient Access to Food Stamp Benefits			
Routine Authorization			
Create allotment file from food stamp client master file			X
Transmit or provide access to allotment listings to issuance sites			X
Nonroutine Authorization			
Initiate supplemental, expedited, or retroactive issuances			X
Initiate replacement issuances due to lost or stolen benefits			X
Other issuance authorization problems			X
Delivering Benefits to Recipients			
Coupon Production, Shipment, and Storage (Including Inventory Management/Monitoring and Security Tasks)	X		
Warrant Production		X	
Coupon/Warrant Delivery to Issuance Sites or Clients (Including Inventory Management/Monitoring and Security Tasks)			X
Coupon/Warrant Allotment Confirmation and Over-the-Counter or Mail Issuance (Both Routine Delivery and Nonroutine Delivery due to Lost or Stolen Coupons or Expedited Process Requirements; also Including Oversight/Management/ Monitoring Tasks)			X
Crediting Retailers and Banks for Benefits Redeemed			
Retailers Count Coupons, Make Change, Endorse Coupons, and Complete Redemption Certificate	X		
Retailers Deposit Warrants in Bank Accounts		X	
Banks Verify Retailer Deposits, Count and Bundle Coupons, Complete Food Coupon Deposit Document, Send Deposit to Federal Reserve Bank	X		

TABLE X.1 (continued)

Function/Task	Coupons Only	Checks Only	Both Systems
Banks Verify Retailers' Deposits and Credit Accounts			X
Federal Reserve Bank Verifies Bank Deposits, Checks for Counterfeit Coupons, Destroys Coupons, Forwards Documents to USDA, Submits Debit Voucher to U.S. Treasury	X		
Federal Reserve Bank Verifies Banks' Deposits and Credits Accounts		X	
Managing Retailer Participation in the Food Stamp Program			
Authorize Retailers to Participate in FSP and Train Retail Staff about Program Regulations	X		
Input Data from Redemption Certificates and Food Coupon Deposit Documents and Produce Redemption Activity Reports	X		
Monitor Redemptions, Investigate Possible Violations, and Administer Sanctions	X		
Set Policy for Retailer Participation and Oversee Redemption System	X		
Monitoring and Reconciling Issuance			
Produce Inventory and Mail Loss Reports FNS-250 and FNS-259	X		
Produce Project Area Participation and Coupon Issuance Reports or Comparable Report on Check Issuance			X
Enter These Data and Maintain Data Bases			X
Set Issuance Policy and Monitor State Issuance Performance			X

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

USDA = U.S. Department of Agriculture; FSP = Food Stamp Program; FNS = Food and Nutrition Service.

1. Program Structure and Procedures

In Alabama, the FSP is administered by the state DHR. Each county has a DHR director, who oversees state welfare activities in that county. Both AFDC and food stamps are within the purview of the county DHR director, but are often housed in separate offices. Under the county DHR director, each food stamp office has a program supervisor for food stamps. The larger counties (for example, Jefferson and Montgomery) also have a supervisor in charge of food stamp issuance; the program supervisor serves that function in the smaller counties. Clients have initial caseworker contact with an eligibility worker (for those applying for both AFDC and food stamps) or a certification worker (for those applying for food stamps only). For most households, food stamp receptionists and cashiers issue the food stamp coupons; in smaller counties, one person performs both receptionist and cashier duties. In some counties, benefits are issued by mail to elderly or disabled clients who qualify for small amounts of benefits and who have inadequate access to transportation.[3] The issuance procedures are fairly uniform among the rural county offices, although the urban offices show some variation.

2. Coupon-Issuance Procedures and Functions

Alabama uses a centralized automated client data system, SCI-II, to maintain data on food stamp recipients and the issuance of food stamp benefits. Each county office has on-line access to the SCI-II system and to the Income and Eligibility Verification System (IEVS), which is the front-end system that determines food stamp eligibility. A caseworker fills out the FSP client record (or turn-around-document [TAD]--Form 1139) during the application process, and a data management worker enters that information into IEVS. The system then determines the applicant's eligibility for food stamps and passes the information into SCI-II, where benefit amounts are determined.

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[3]County FSP supervisors determine who will receive benefits by mail, on the basis of the federal regulations and each county's history of mail-issuance loss.

For most ongoing cases, recipients pick up food stamp coupons at the county food stamp offices on a monthly basis, usually during the first two weeks of the month. Households are assigned days of the month that mark the beginning of the period during which their coupons can be picked up. After arriving at the food stamp office on or after the assigned day, a client presents his or her FSP identification card to the issuance receptionist, who enters the client's identification number into the SCI-II system. Entering the identification number causes the client's record to be updated immediately with the new issuance data, and an authorization-to-participate (ATP) card is printed on a printer in the issuance office. The client signs the ATP card, and a cashier (who also might be the receptionist) checks the signature against the signature on the client's identification card and issues the coupons according to the specifications on the ATP card.

Issuance is by mail, rather than over-the-counter, for approximately 21 percent of the Alabama food stamp caseload. Mail issuance is done by the local offices after they receive a printout from the state listing the mail-issuance households; each county office has its own schedule for mail issuance, which, in most offices, includes the first working day of the month (when the cash-out checks were usually mailed). The procedure for mail issuance is as follows: the identification numbers are entered into SCI-II; the ATP cards are printed out; and the coupons are counted, inserted into envelopes with the ATP cards (which serve as mailing labels), and mailed.

Information on new cases, including those requiring expedited service and others, is entered into the SCI-II system daily. Expedited cases are usually "walked through" the application process by their certification workers and generally receive their coupons over-the-counter during the first month in order to ensure that the standard of promptness for expedited cases (requiring that they receive their coupons within five days) is met, even if they are switched to mail issuance subsequently. Mail-issuance coupons for new, nonexpedited cases are mailed on the next scheduled mailing day, which is usually the first working day of the following month. Clients who are new, nonexpedited cases for over-the-counter issuance can pick up their coupons on the next regularly scheduled, assigned

issuance day; that day may be the next working day, the first working day of the following month, or a day between the two.

Under the coupon-based system, the local offices count and reconcile the coupon books at the end of each day. The offices compile a total monthly aggregation at the end of each month. Two reports are prepared from the monthly reconciliation and monitoring: (1) the Food Coupon Accountability Report (FNS-250), which is used to report discrepancies between inventories of coupons and the amounts of coupons issued by project areas, and (2) the Food Stamp Mail Issuance Report (FNS-259), which is used to report the value of coupons that were replaced due to reported losses in the mail. On a quarterly basis, the Financial Status Report (FNS-269) reports expenditures for separate food stamp activities, such as certification, issuance, and automated data processing.[4] These reporting and aggregating functions are performed by county-level staff, who reconcile the coupons and prepare the reports, and by state-level staff in the Food Stamp Accounting office of the Finance Division, who consolidate the county reports to meet federal reporting requirements.

3. Check-Issuance Procedures and Functions

In the pure cash-out demonstration, approximately 2,050 households received food stamp benefits each month in the form of a state warrant, which is a standard financial instrument redeemable for cash through any institution that normally cashes checks. Check issuance began at the county level, when a caseworker completed the TAD, and a data management worker entered the information into IEVS. IEVS was programmed to randomly assign clients to the cash-out sample on the basis of the sequential component of their food stamp case identification numbers. After the client information had been entered, the on-line SCI-II master record for that case and the printout of that record at the local office showed whether the client was assigned to receive check benefits.

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[4]These reports do not specify the labor costs of staff who are involved in issuance but who do not actually handle coupons, such as receptionists, supervisors of cashiers, or security personnel. Therefore, these data were not adequate for evaluation purposes.

Every workday at 5 PM, when the county offices closed, the state's automated system in the Data Systems Management Division updated the SCI-II master food stamp file. The batch check-issuance tape was then built, and that tape was passed to the Comptroller's Office. Staff in the Comptroller's Office determined that funds were available to cover the checks on that tape, assigned warrant numbers, and printed warrants. Staff in the Comptroller's Office also performed quality control, ensuring that the checks were correctly signed, sealed, and printed.

A payroll register was printed out as part of the batch check-issuance job and was sent to Food Stamp Accounting in the Finance Division, where it was checked for correct dates and warrant numbers and was signed by two staff members. The signed payroll register was then taken to the Comptroller's Office, and the checks were released. On the first of the month, when most cash-out checks were issued, staff from DHR Office Services picked up the checks from the Comptroller's Office and mailed them. On other days of the month, when fewer than 200 checks (usually for expedited and supplemental issuances) were issued, the checks were picked up and mailed by staff from Food Stamp Accounting.

In general, food stamp warrants that were routinely received and cashed by clients were reconciled and stored in the Treasurer's Office, together with records pertaining to those warrants. An undelivered food stamp warrant that was returned in the mail was sent to Food Stamp Accounting, where staff entered information about it into SCI-II. Each county received off-line listings of the SCI-II data on any warrants that had been returned during the previous working day. A county certification or eligibility worker contacted each client whose warrant had been returned and determined whether the client was entitled to the warrant and the reason for the warrant's return. Workers then authorized the state office either to release the warrants or to void them.

Food Stamp Accounting staff also handled the reports on check issuance that were required by FNS. The check-issuance data were reported on the FNS-250 and FNS-269 reports, along with, but shown separately from, the coupon-issuance data.

If a warrant was received by a client, but was destroyed, lost, or stolen before it could be endorsed and cashed, a replacement warrant was issued to the client after the certification or eligibility worker authorized a replacement issuance; this procedure required that the client sign an affidavit stating that the household did not receive, sign, or cash the warrant. However, if a warrant was endorsed and cashed by the client, the state's policy was that it would not reimburse the client, should the money be lost or stolen.

XI. THE IMPACT OF ALABAMA'S FOOD STAMP CASH-OUT DEMONSTRATION ON ADMINISTRATIVE COSTS

A major impetus behind the interest in food stamp cash-out is an expected savings in administrative costs through the streamlining of issuance procedures. Switching to check issuance would eliminate many county-level and state-level issuance activities in systems such as Alabama's,[1] as well as the federal-level costs of authorizing and monitoring retailers, and printing and transporting coupons. However, some state-level costs would be created, such as check printing, production, issuance, and reconciliation costs. (See Chapter X for a description of the coupon-issuance and check-issuance procedures.) We found that costs were indeed lower under check issuance than under coupon issuance; overall, check-issuance costs were about one-half coupon-issuance costs.

In Section A, which comprises most of this chapter, we describe and compare the costs of coupon and check issuance. In Section B, we describe the costs of planning and implementing the cash-out demonstration. Appendix M details the methodology used to estimate issuance, planning, and implementation costs.

A. ISSUANCE COSTS

In this section, we discuss the tested hypotheses and present our research design for examining issuance costs. We then describe and compare county-, state-, and federal-level issuance costs under the coupon and the check systems.

1. Principal Hypotheses

We identified two hypotheses to be tested in the study of administrative costs. The first is that reduced issuance costs at the county level more than offset higher costs at the state level, to produce a net savings associated with check issuance as compared with coupon issuance. Potential areas of

[1]Although incurred at the county or state level, one-half of the costs of these activities are paid by the federal government.

savings include storing and transporting coupons, delivering benefits, and monitoring and reporting on benefit issuance. Our second hypothesis is that total federal costs of administering the Food Stamp Program (FSP) are lower under the check-based system than under the coupon-based system. Although the Alabama demonstration was too small to have a perceptible effect on federal costs, a nationwide implementation of cash-out would eliminate some categories of federal costs and would substantially reduce others. For example, under cash-out, the FSP would no longer pay the costs of printing, storing, and transporting coupons to state agencies; authorizing and monitoring retail stores; and redeeming coupons through the Federal Reserve System.

The results of our research support both hypotheses. Substantial reductions in costs incurred at the county level more than offset higher costs incurred at the state level, and administrative costs incurred at the federal level were nearly eliminated, for an overall reduction in issuance costs of 50 percent under check issuance when compared with coupon issuance.

2. The Research Design for Examining Issuance Costs

The objectives of the research on issuance costs are to compare the costs of coupon and check issuance, and to calculate the changes in components of those costs when check benefits, rather than coupons, are issued. The comparisons are made both for total direct costs and for key components of those costs, such as labor, postage, and the time spent by certification and eligibility workers resolving issuance problems.

Throughout this chapter, "issuance costs" refers to the direct costs of issuing food stamp coupons or checks. The direct costs include direct labor costs and fringe benefits of issuance workers and their supervisors, and printing, storage, transportation, security, postage, and other costs. These costs could be readily obtained or clearly observed. Indirect or overhead costs (such as the costs of work space, utilities, and equipment, and the labor of persons not directly involved in issuance) are not included in our analyses. The state's Finance Division uses a complex cost-allocation plan for allocating indirect costs among the various functions and divisions, and it was unclear how the

formulas in that plan might be applied to the check-issuance process. Because overhead costs are not included in the analysis, the cost difference between coupon and check issuance might be understated; overhead costs might be lower under check issuance because the use of such resources as work space would probably be lower than under coupon issuance.

In all but the last part of this section (Section A), our discussion of food stamp benefit issuance costs is based upon the level of government (county, state, or federal) at which the costs are *incurred*. Due to federal cost sharing, 50 percent of issuance costs incurred at the county and state levels are actually *paid* by the federal government. The final part of this section examines issuance costs from the perspective of the level of government at which those costs are paid.

a. Data Collection

We obtained the issuance cost data from a variety of sources, including in-person and telephone interviews with state and county food stamp program staff, a mail survey of certification and eligibility workers about issuance problems, and program reports and documents.[2] At the state level, to obtain estimates of time and other resource costs of coupon and check issuance, we interviewed staff in the following offices:

- The Department of Human Resource's (DHR) Information Systems Division, which oversaw the computer processing for check issuance and produced computer reports on food stamp check and coupon issuance
- DHR's Data Systems Management Division, which ran the computer programs to generate files of participants and benefit amounts for the mail issuance of checks
- The Comptroller's Office, which used the files generated by the Data Systems Management Division to produce the checks

[2]In Alabama, "certification worker" refers to caseworkers who handle food stamp applications, and "eligibility worker" refers to caseworkers who handle Aid to Families with Dependent Children (AFDC) applications, including joint AFDC and food stamp applications. Thus, the certification workers resolve food stamp issuance problems for households receiving food stamps but not receiving AFDC, and the eligibility workers resolve food stamp issuance problems for households receiving both food stamps and AFDC.

- The Treasurer's Office, which received, reconciled, and maintained the canceled checks
- Food Stamp Accounting within DHR's Fiscal Administration Division, which oversaw and monitored the check-issuance system and processed food stamp checks returned in the mail; and which aggregates and reports coupon- and check-issuance data for FNS, and handles the authorization, storage, delivery, reconciliation, and monitoring of coupons

To obtain county-level administrative costs, we visited eight demonstration county food stamp offices in June and July of 1990, including the two urban cash-out counties (Jefferson and Montgomery) and six rural counties (Clay, Conecuh, Dale, Dekalb, Fayette, and Lauderdale). In each office, we interviewed an issuance receptionist and/or cashier, and the program director and/or issuance supervisor; in most offices, we also interviewed certification and/or eligibility workers. The purpose of the interviews was to obtain information on the implementation of the cash-out demonstration, the time and resource costs of coupon and check issuance, the impact of cash-out on recipients, the impact of cash-out on office operations, problem resolution, and the vulnerabilities of benefits to fraud and losses (which are covered in Chapter XII). In addition to the on-site interviews, we conducted follow-up telephone interviews with county staff in November of 1990 in order to obtain additional information on problem resolution and on the staff's experience with cash-out in the first six months of the demonstration's operation.

In November of 1990, we also conducted a mail survey of eligibility and certification workers. That survey contained questions about workers' experiences with check-issuance problems during the cash-out demonstration, including questions about the types of problems encountered, how those problems were resolved, and the time spent resolving the problems. The one-page instrument was sent to each of the 87 certification and eligibility workers in the 12 demonstration counties who had dealt with one or more check-issuance problems, and asked about each of the 152 check-issuance

problems that were officially recorded during the period of May 1990 through October 1990.[3] The survey instrument is shown in Appendix L.

b. Analysis Methods

The interviews with state-level and county-level staff obtained information on the amount of time spent by each staff person on coupon issuance and on check issuance. We then computed labor costs by multiplying the amount of time that each staff person spent on issuance tasks by the wage and fringe-benefit rates for that position. From relevant county-level and state-level staff, we also obtained information about the nonlabor costs of benefit issuance, such as postage, storage, transportation, security, and insurance. We examined costs on a "per-case-month" basis, which is a common means of comparison for FSP costs. Because per-case-month costs are obtained by dividing a monthly cost by the monthly food stamp caseload, we can compare costs for caseloads of different sizes.

3. Issuance Costs Under the Coupon System

a. County-Level Costs

As shown in Table XI.1, the average county-level cost of coupon issuance in the 12 demonstration counties was $1.32 per case-month in October of 1990.[4] The cost per case-month ranged from $0.65 in Montgomery County to $4.25 in Clay County. The second lowest cost was in Jefferson County, where the cost was $1.07 per case-month. The lower costs in Montgomery and

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[3]Each demonstration county experienced a minimum of two cash-issuance problems during this period. The number of problems in each county was as follows: Choctaw, 2; Clay, 3; Conecuh, 6; Dale, 20; Dallas, 8; Dekalb, 5; Fayette, 3; Jefferson, 44; Lauderdale, 6; Marion, 3; Montgomery, 44; and Pickens, 8.

[4]The average issuance cost for the 8 visited counties was $1.17 per case-month; when we factored the 4 unvisited rural counties into the computation, the average cost for all 12 demonstration counties was estimated to be $1.32 per case-month. The latter figure is higher than the former figure because all four unvisited counties were rural, and the per-case-month cost for issuance in rural counties was substantially higher than that for urban counties; thus, factoring in the unvisited (rural) counties increased the average issuance cost.

TABLE XI.1

COUNTY-LEVEL COUPON ISSUANCE COSTS

County	Direct Labor (dollars)	Fringes (dollars)	Security (dollars)	Postage (dollars)	Total Cost (dollars)	Monthly Caseload[a]	Cost per Case-Month (dollars)
Clay	1,263	316	--	25	1,604	377	4.25
Conecuh	2,090	523	--	175	2,787	1,375	2.03
Dale	1,468	367	--	74	1,909	1,667	1.14
Dekalb	3,536	884	--	--	4,420	1,882	2.35
Fayette	2,211	553	--	--	2,764	960	2.88
Jefferson (U)	16,982	4,246	4,000	94	25,322	23,703	1.07
Lauderdale	3,340	835	30	211	4,416	2,328	1.90
Montgomery (U)	4,844	1,211	552	83	6,690	10,344	0.65
Total for Visited Urban Counties	21,826	5,457	4,552	177	32,012	34,047	0.94
Total for Visited Rural Counties	13,908	3,477	30	485	17,900	8,589	2.08
Four Unvisited Rural Counties[b]	13,665	3,416	25	506	17,612	8,435	2.09
Total for All Demonstration Counties	49,399	12,350	4,607	1,168	67,524	51,071	1.32[c]

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

NOTE: (U) designates an urban county.

[a]For October 1990.

[b]Site visits were not conducted in 4 rural counties (Choctaw, Dallas, Marion, and Pickens). However, so that the per-case-month cost for the 12 demonstration counties was not biased toward the lower urban figure ($0.94, compared with $2.08 for the rural visited counties), we estimated the issuance costs in these counties on the basis of the average per-case-month cost by category in the 6 rural counties that we did visit, added those estimates to the total, and calculated a new total per-case-month cost for all 12 demonstration counties.

[c]This estimate is based on a caseload count that includes cash-out households. If cash-out households were excluded, the total cost per case-month would be 5 percent higher. Also, this cost figure reflects the 67 percent urban/33 percent rural composition of the demonstration counties' caseloads. If the estimate were weighted to reflect the statewide 46 percent urban/54 percent rural composition, it would increase to $1.53 per case-month.

Jefferson Counties reflect the economies of scale in the more populous counties, which offset higher security costs and total labor costs. The wide range in costs among the rural counties resulted primarily from differences in staffing patterns. For example, the county director of DHR was involved in issuance in some counties, but not in others; in addition, the amount of time spent on issuance by the FSP supervisors varied widely among the counties.[5] These differences resulted from variations in the levels of interest and expertise of the staffs.

b. State-Level Costs

As shown in Table XI.2, the average state-level cost of coupon issuance was $0.22 per case-

TABLE XI.2

STATE-LEVEL COUPON-ISSUANCE COSTS
(In Dollars)

Type of Monthly Cost	Amount
Accounting (Direct Labor and Fringe Benefits)	1,001.08
Auditing (Direct Labor, Fringe Benefits, and Mileage)	345.42
Production of Issuance Listings (Direct Labor and Fringe Benefits)	431.71
Insurance	3,000.00
Storage	10,000.00
Transportation	21,666.67
Total	36,444.88
Per Case-Month[a]	0.22

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]Based on an average statewide monthly caseload in FY1990 of 165,752.

- $0.17 per case-month for Federal Reserve Bank fees
- $0.14 per case-month for authorizing and monitoring retail stores

A total of $0.51 per case-month in federal costs would be eliminated under nationwide cash-out.

4. Issuance Costs Under the Check System

a. County-Level Costs

County staff were not directly involved in the issuance of food stamp checks; consequently, the costs of check issuance incurred at the county level were small, consisting primarily of the time spent by certification and eligibility workers to resolve check-issuance problems. From a mail survey of certification and eligibility workers, we learned of a number of different types of *check*-issuance problems, including a food stamp check which had a benefit amount that was believed by the recipient to be incorrect, the incapacitation of a designated payee, and the nonreceipt of a benefit check. On the basis of the mail survey, we determined that the cost of problem resolution under check issuance decreased from $0.38 per case-month in May of 1990 (the first month of cash-out, when problems with the software programs and issuance procedures were still being resolved) to $0.06 per case-month in October of 1990.

On the basis of our on-site interviews with eligibility and certification workers, we determined that the incidence of *coupon*-issuance problems was quite low, and that the resolution of a typical problem required very little labor time; therefore, we did not factor this type of cost into our computation of county-level coupon-issuance costs, as discussed in Section A.3. In effect, we assigned a zero cost to the resolution of coupon-issuance problems. Thus, $0.06 per case-month is our estimate of the maximum difference in the cost of problem resolution between the check-issuance and coupon-issuance systems. However, the true difference might have been somewhat smaller, because (1) the cost of problem resolution under the coupon-issuance system, although small, was actually larger than zero, and (2) the cost of problem resolution under the check-issuance system

might have declined further as workers gained more experience with check issuance. Table XI.3 shows the labor cost, by county, for check-issuance problem resolution during October of 1990.

b. State-Level Costs

As shown in Table XI.4, the average state-level cost of check issuance was $0.97 per case-month. In addition to the cost of the postage needed to mail the checks, the state-level cost includes time spent by (1) data systems staff, to process the file for producing checks, (2) information systems staff, to produce the daily report of checks returned in the mail, (3) staff in the Comptroller's Office, to produce the checks, (4) accounting staff, to oversee check production, mail checks, and handle checks returned in the mail, and (5) staff in the Treasurer's Office, to process, reconcile, and store canceled checks. The per-case-month cost of $0.97 might be higher than the cost would be (1) if the cash-out caseload had been larger (as it would be under total cash-out), and (2) under an extended demonstration of cash-out. With a larger cash-out caseload, economies of scale could cause per-case-month costs to decline, because some check-issuance costs (such as labor costs for Data Systems Management Division and Food Stamp Accounting staff) would not be significantly greater with a larger number of check issuances. Under a more protracted demonstration of cash-out, staff would have greater opportunity to gain experience with check-issuance procedures (for example, handling returned checks), and additional software problems might be identified and resolved, so the labor costs associated with those problems would be likely to be fall below the costs observed in this demonstration.

c. Federal Costs

The Federal Reserve System recovers all of its costs of processing checks by charging processing fees to banks. Thus, no costs that must be paid by any level of government are incurred as a consequence of the processing food stamp checks by the Federal Reserve System. The absence of costs incurred at the federal level under the check-issuance system contrasts sharply with the

TABLE XI.3

COUNTY-LEVEL CHECK-ISSUANCE COSTS

County	Number of Issuance Problems, October 1990	Direct Labor Cost[a] (In Dollars)	Fringe Benefits (In Dollars)	Total Labor Cost (In Dollars)
Choctaw	0	$0	$0	$0
Clay	0	0	0	0
Conecuh	1	10.66	2.67	13.33
Dale	2	21.32	5.33	26.65
Dallas	1	10.66	2.67	13.33
Dekalb	0	0	0	0
Fayette	0	0	0	0
Jefferson	1	10.66	2.67	13.33
Lauderdale	1	10.66	2.67	13.33
Marion	0	0	0	0
Montgomery	1	10.66	2.67	13.33
Pickens	3	31.98	8.00	39.98
Total	10	106.60	26.68	133.28
Per Case-Month[b]				0.06

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]The average biweekly salary midpoint for eligibility and certification workers was $819.73, or $10.25 per hour. According to the mail survey of the workers, the average time spent handling one problem was 1.04 hours.

[b]Based on a check-issuance caseload in October 1990 of 2,124.

TABLE XI.4

STATE-LEVEL CHECK-ISSUANCE COSTS
(In Dollars)

Type of Monthly Cost	Amount
Data Systems Management Division (Direct Labor and Fringe Benefits)	156.90
Food Stamp Accounting (Direct Labor and Fringe Benefits)	630.73
Postage, October 1990	531.00
Treasurer's Office, at $0.04 per Check[a]	84.96
Comptroller's Office--Warrant Division, Audit Division, and Data Processing (Direct Labor and Fringe Benefits)	199.01
Warrant Forms, at $0.01 per Check[a]	21.00
Information Systems Consultant	433.40
Total	2,057.00
Per Case-Month[a]	0.97

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]Based on a check-issuance caseload in October 1990 of 2,124.

substantial costs incurred at the federal level under the coupon-issuance system, which are described in Section A.3. Under coupon issuance, federal-level costs amounted to $0.51 per case-month.

5. The Effects of Cash-Out on Issuance Costs

a. Costs, by Level Incurred

Table XI.5 summarizes the direct per-case-month costs of the coupon- and check-issuance systems at the county, state, and federal levels. These costs are shown at the level *incurred*, rather than at the level *paid*. The amounts shown do *not* reflect federal sharing of 50 percent of issuance costs incurred at the state and county levels. Federal cost sharing is addressed in the next section, in conjunction with our discussion of Table XI.6.

As shown in Table XI.5, the lower costs of check issuance incurred at the county and federal levels more than offset the higher costs incurred at the state level. Compared with coupon issuance, labor costs for check issuance were substantially lower at the county level ($0.06 per case-month, compared with $1.21 for coupon issuance); however, they were higher at the state level ($0.71 per case-month, compared with $0.01 for coupon issuance). For nonlabor direct costs at the county level, coupon-issuance costs amounted to $0.11 per case-month, whereas none of those costs were incurred under check issuance. At the state level, nonlabor costs amounted to $0.26 for check issuance and $0.21 for coupon issuance. In addition, under 100 percent check issuance, a total of $0.51 per case-month in costs incurred at the federal level would be eliminated.

b. Comparison of Costs, by Level Incurred and Level Paid

Overall, we estimate that the cost of check issuance was 50 percent that of coupon issuance, and that three-fourths of the savings accrued to the federal government and one-fourth to the state government. As shown in Table XI.6, the $2.05 per case-month costs of *coupon issuance* were shared as follows: the $0.51 in costs incurred at the federal level were paid entirely by the federal government, while the $1.54 in costs incurred at the state and county levels were paid equally by the

TABLE XI.5

COUPON-ISSUANCE AND CHECK-ISSUANCE COSTS, BY LEVEL OF GOVERNMENT AT WHICH COST IS INCURRED
(In Dollars)

	Cost per Case-Month, by Level at which Cost Is Incurred							
	Coupon Issuance				Check Issuance			
Cost	County	State	Federal[a]	Total	County	State	Federal[a]	Total
Labor[a]	1.21	0.01	--	1.22	0.06	0.71	--	0.77
Coupon Storage, Transportation, Distribution, and Insurance	--	0.21	0.02	0.23	--	--	--	--
Security	0.09	--	--	0.09	--	--	--	--
Postage	0.02	--	--	0.02	--	0.25	--	--
Coupon Printing	--	--	0.18	0.18	--	--	--	--
Warrant Forms	--	--	--	--	--	0.01	--	0.01
Federal Reserve Bank Fees	--	--	0.17	0.17	--	--	--	--
Authorizing and Monitoring Retail Stores	--	--	0.14	0.14	--	--	--	--
Total	1.32	0.22	0.51	2.05	0.06	0.97	--	1.03

SOURCES: County- and state-level cost data were obtained from the Evaluation of the Alabama Food Stamp Cash-Out Demonstration. Federal cost data for coupon issuance were obtained from Kirlin et al., 1990; their 1988 data were updated to 1990 by using the fixed-weight price index for federal nondefense purchases of goods and services.

[a]Federal costs were available by function, rather than by labor/nonlabor. Therefore, federal labor costs are not shown separately, but are included in the costs of each function.

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TABLE XI.6

ISSUANCE COSTS PER CASE-MONTH, BY LEVEL
OF GOVERNMENT AT WHICH COSTS ARE INCURRED AND PAID
(In Dollars)

	Costs Incurred		Costs Paid		
	Coupon Issuance (A)	Check Issuance (B)	Coupon Issuance (C)	Check Issuance (D)	Savings (E=C-D)
Federal Government	0.51	0.00	1.28	0.515	0.765
State/County Government	1.54	1.03	0.77	0.515	0.255
Total	2.05	1.03	2.05	1.030	1.020

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

NOTE: The amounts shown under "Costs Paid" reflect federal sharing of 50 percent of costs incurred at the state and county levels.

state and federal governments.[7] Thus, coupon-issuance costs paid by the federal government were $1.28 per case-month, and coupon-issuance costs paid by the state government were $0.77 per case-month. The $1.03 per case-month costs of *check issuance* were incurred entirely at the state and county levels and were paid equally by the state and federal governments; thus, check-issuance costs paid by the federal government were $0.515 per case-month, and check-issuance costs paid by the state government were also $0.52 per case-month. The federal government realized a savings of $0.765 per case-month when issuance was switched to checks, and the state government realized a savings of $0.255 per case-month. These estimates fully reflect federal sharing of 50 percent of issuance costs incurred at the state and county levels.

This estimate of the difference in costs between the check-issuance and coupon-issuance systems is conservative. The conservative nature of the estimate is due to (1) the exclusion of overhead costs from our calculations, as explained in Section A.2 (those costs might be lower under check issuance), and (2) the limited nature of the demonstration, which precluded some economies of scale and labor efficiencies that might have been achieved under total cash-out or over the long run.

B. COSTS OF PLANNING AND IMPLEMENTING THE CASH-OUT DEMONSTRATION

Substantial costs were incurred in planning and implementing the cash-out demonstration. We estimated the labor and nonlabor costs on the basis of data obtained through on-site interviews and telephone conversations with Food Stamp Division staff who handled the planning and implementation of cash-out and the training of county-level and state-level staff. Those on-site interviews were held in conjunction with the interviews described in Section A.2. Table XI.7 summarizes the costs of planning and implementing the cash-out demonstration, by type of cost.

[7]This estimate of $2.05 is significantly lower than the estimate of $3.00 per case-month by Kirlin et al. (1990) in the evaluation of the electronic benefit transfer (EBT) demonstration. These differences are likely to stem from two factors: (1) issuance procedures and labor and other costs differ in Alabama and Pennsylvania, the site of the EBT demonstration, and (2) the EBT demonstration evaluation included overhead costs (see Abt Associates, Inc., 1987).

TABLE XI.7

COSTS OF PLANNING AND IMPLEMENTING
ALABAMA'S CASH-OUT DEMONSTRATION
(In Dollars)

Type of Cost	Amount
Software Development (Technical Labor Costs)	137,025
Staff Training (Labor and Per-Diem Costs)	37,155
Policy Development (Labor Costs)	6,739
Brochure (Printing and Mailing Costs)	1,870
Total	182,789

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

Overall, those labor and associated costs were estimated to be $182,789. (As with our estimate of issuance costs, this estimate does not include overhead.)

Software development was by far the most resource-intensive implementation activity of the cash-out demonstration. A substantial amount of technical labor was required to write the programs that assigned households to the cash-out sample, created the batch check-issuance tape, and tracked the checks after issuance. For eight months, seven staff persons spent from one-quarter to full time writing and testing the programs; their total labor cost amounted to $137,025.

A considerable amount of staff training was required to ensure that the cash-out demonstration was implemented and operated smoothly. At the county level, training costs included staff hours spent in training, as well as the mileage and per-diem costs of staff from outside Montgomery and Jefferson Counties who attended training in those two counties. A total of 340 county-level staff received training, including DHR directors, program supervisors, issuance supervisors, receptionists, cashiers, certification and eligibility workers, and clerical workers. Their labor cost (including time spent on travel and on actual training) amounted to $25,040, plus 25 percent fringe benefits, for a total labor cost of $31,300. The mileage cost for 200 staff persons to attend training in Montgomery and Jefferson Counties was $2,700, and the per-diem cost for that training was $1,100. Thus, the total county-level training costs were $35,100.

Training costs for state-level staff, which included the hours spent in training by ten staff members in the Food Stamp Division and the Fiscal Administration Division of DHR, amounted to $575 (including fringe benefits). In addition, the Food Stamp Division's Cash-Out Trainer spent a total of 78 hours preparing written materials and conducting training, for a total cost of $1,480 (including fringe benefits). The total training costs incurred at the state level were $2,055.

Planning and implementation costs also included the time spent by the DHR Commissioner (12 hours), the Acting Director of the Food Stamp Division (64 hours), the Cash-Out Project Manager (120 hours), the Cash-Out Trainer (100 hours), and a policy analyst in the Food Stamp Division (10

hours) to attend meetings about the cash-out demonstration, to work out and document the check-issuance procedures, and to revise the Administrative Regulations. Those total labor costs (shown in Table XI.7 as policy development costs) amounted to $6,739.

A brochure explaining cash-out was printed, mailed to cash-out households, and distributed to interested parties, such as grocers. The printing cost for 6,000 brochures was $570, and the postage for mailing the brochures to cash-out households was $1,300, for a total cost of $1,870.

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XII. THE IMPACT OF ALABAMA'S FOOD STAMP CASH-OUT DEMONSTRATION ON ISSUANCE-SYSTEM LOSS

Food stamp benefits, whether issued in the form of coupons or checks, are vulnerable to loss at several points in the issuance system.[1] This benefit loss is due to theft or loss during production, shipping, storage, or mailing; theft or loss of benefits after client receipt; and duplicate issuances. The costs associated with benefit loss might be borne by the state or federal government, the client, or (with check issuance) a third party, such as a bank or grocery store.[2]

In this chapter, we assess the impact of the Alabama Food Stamp Cash-Out Demonstration on these types of loss. This impact stems from two factors. First, by eliminating several steps in the issuance process, check issuance requires fewer transactions and, consequently, provides fewer opportunities for loss from theft and accidental overissuance due to cashier error. Second, because unauthorized persons might have more difficulty negotiating checks than coupons, the theft of benefits from recipients might be reduced; checks are issued in the names of the intended recipients and can legally be cashed only by those individuals, whereas coupons are negotiable by the bearer. However, the greater security provided by checks might be offset if cash is considered more attractive than coupons and, hence, is a more frequent target of theft.

The results of this assessment of the impact of cash-out on the Food Stamp Program's (FSP) vulnerabilities to benefit loss should be interpreted with caution. For some types of loss, accurate

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[1]As used in this chapter, *loss* refers to a financial loss incurred by the government, a client, or a third party.

[2]We do not evaluate the impact of cash-out on what might be considered an additional type of loss--loss incurred by clients as a consequence of their use of food stamp coupons in an unintended manner, such as selling them to obtain cash (trafficking), using them to purchase ineligible items, or spending cash change from coupon purchases on ineligible items. This misuse of food stamp coupons does not have a direct counterpart under check issuance. Under check-issuance, clients receive cash benefits, hence they have no need to exchange their benefits for cash; furthermore, no items are ineligible. Thus, this type of loss is in effect defined away under cash-out, although the issue of clients using check benefits to purchase items that are ineligible for purchase with coupons (potentially an important issue for policymakers) remains. (As discussed in Chapter V, the household survey produced little evidence of such purchases.)

data are not available. Furthermore, the Alabama Cash-Out Demonstration was of small scale and relatively brief duration; very different results might be obtained from a larger and lengthier check-issuance demonstration. However, our analysis does provide an indication of potential differences in vulnerabilities between the coupon-issuance and check-issuance systems.

This chapter is organized around the bearers of the costs associated with food-stamp issuance loss. After describing the types of losses and discussing our research design in Sections A and B, respectively, we examine losses to the state and federal governments in Section C, loss to food stamp clients in Section D, and loss to third parties in Section E. Section F summarizes our findings.

A. TYPES OF ISSUANCE-SYSTEM LOSSES

Table XII.1 lists five categories of loss, indicates whether the loss is associated with coupon issuance or check issuance, and shows who pays for or bears each loss. The table shows that fewer types of losses exist under check issuance than under coupon issuance, but does not show the amount of loss associated with each issuance system (we discuss this issue later in the chapter). The types of losses are:

1. ***Losses in production and handling.*** These losses include benefits stolen during production, shipment, or storage, and accidental overissuance and loss from issuance-office inventories. The federal government absorbs loss that results from theft occurring before the receipt of coupons by the states. According to FSP regulations, after the states receive the coupons and place them in bulk or local storage (usually in local banks), the states are responsible for loss resulting from theft, embezzlement, and cashier and clerical errors.

2. ***Duplicate issuances.*** Duplicate issuance occurs when benefits are erroneously issued more often than they should be during a benefit period. The states bear this loss, although administrative claims for repayment are made against the client when the error is discovered.

3. ***Loss in the mail.*** During the Alabama Cash-Out Demonstration, some coupon allotments and all checks were mailed to the clients. All benefits that were actually or fraudulently reported lost in the mail were replaced. This loss is borne by the

TABLE XII.1

ISSUANCE SYSTEM VULNERABILITIES TO LOSS IN THE
ALABAMA FOOD STAMP PROGRAM AND CASH-OUT DEMONSTRATION

Type of Losses	Issuance System		Who Pays for or Bears the Loss	
	Coupons	Checks	Coupons	Checks
Loss in Production and Handling				
Theft during production, shipment, and storage	X		State/Federal Governments	
Accidental overissuance and loss from issuance-office inventories	X	X	State Government	State Government
Duplicate Issuances	X	X	State Government	State Government
Loss in the Mail	X	X	State/Federal Governments	Banks and Other Check-Cashing Institutions[a]
Benefits Lost by or Stolen from Clients after Being Received	X	X	Clients	Clients; Banks and Other Check-Cashing Institutions[b]

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]If the lost checks are fraudulently cashed.

[b]If the client had already endorsed the check (whether cashed or not), the client bears the loss. If the client had not endorsed the check, the financial institution cashing the fraudulently endorsed check bears the loss.

state and federal governments under the coupon-issuance system.[3] Under the check-issuance system, no loss is incurred if a lost check is never cashed. However, if a lost check is improperly cashed and the client reports never receiving or endorsing the check, then, according to Alabama state law, the financial institution that cashed the check bears the loss.

4. ***Loss of benefits after client receipt.*** This loss occurs when coupon or check benefits are lost, stolen, or damaged after they have been received by the client. Under the coupon-issuance system, this loss is borne by the client, because coupons lost or stolen after being received by the client are not replaced. Under the check-issuance system, this loss can occur either before or after the checks have been endorsed and cashed. Checks lost or stolen before being endorsed and cashed are replaced; if the lost or stolen checks are then cashed by an unauthorized person, that action represents a loss to the financial institution that cashed the check. Check benefits lost or stolen after the check is cashed are not replaced, and the loss is borne by the client.

Several potential sources of loss were not examined in our analysis, because they were not significant sources of loss in the Alabama Food Stamp Cash-Out Demonstration. Under a nationwide coupon- issuance system, two such losses, inflated redemption credits claimed by retailers and banks, and altered or counterfeit benefits, have been estimated to be close to zero.[4] Under the check-issuance system, redemption credits are eliminated, and loss from altered or counterfeit benefits is expected to be close to zero.[5]

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[3]States are responsible for mail losses in excess of 0.5 percent of the dollar value of the coupons issued (known as the "tolerance level"). The federal government absorbs mail losses below the tolerance level.

[4]In their evaluation of an electronic benefit transfer demonstration in Pennsylvania, Kirlin et al. (1990) estimate that loss due to excessive redemption credits claimed by retailers and banks (about 0.01 percent of benefits issued) is close to zero nationwide, because excessive credits are corrected and do not directly increase program costs. They also estimate that, nationally, about $20,000 in counterfeit coupons are discovered annually, amounting to less than 0.001 percent of benefits issued (or substantially less than $0.01 per case-month).

[5]Potentially, a food stamp check could be altered to inflate its value or to change the name of the payee; however, no such incidents were detected or reported in the Alabama Cash-Out Demonstration. An altered or counterfeit check would be discovered during the reconciliation procedures of the Alabama Treasurer's Office, in which all canceled checks go through an automated scanning process. In that process, warrant numbers are matched to a computer file and checked for correct payee and amount. In the event of a discrepancy, the discrepant check is flagged, and a worker pulls it from the batch job in which it was being processed and tracks down the source of the discrepancy. In such a case, the responsibility for the financial loss from the altered or counterfeit check would be borne by the financial institution that had cashed the check.

Another potential source of loss, excessive issuance, is insignificant in Alabama. Excess issuance might result when authorization-to-participate (ATP) cards are lost, stolen, altered, or counterfeited, and are then used fraudulently to obtain benefits.[6] Alabama's in-person ATP system, unlike that in many states, removes all or most of the opportunities for loss from excessive ATP authorization, a source of loss in systems in which ATP cards are mailed directly to clients every month.[7] Because ATP cards were not used under Alabama's check-issuance system, any potential loss from excessive ATP authorization was eliminated.

B. RESEARCH DESIGN

[redacted]

Accounting Office. We obtained copies of these reports from the Food Stamp Accounting Office. We also obtained corresponding information on check issuance from the FNS-46 and FNS-250 reports and supplemented the information with data compiled by the state Food Stamp Division.

Direct data on the other sources of loss in Alabama are not available; however, we obtained limited information from interviews with food stamp staff and focus group discussions with clients. The interviews with food stamp staff are described in Chapter IX, and the focus group discussions are described in Mazur and Ciemnecki (1991).

C. LOSSES TO THE STATE AND FEDERAL GOVERNMENTS

Under cash-out, reducing the number of steps in the benefit production and handling process and shifting the cost of fraudulently redeemed benefits to third parties, such as banks and stores, virtually eliminated the losses borne by the state and federal governments. Such losses were already small under coupon issuance.

1. Loss in Production and Handling

a. Coupon Benefits

Accidental overissuance of coupons to clients and loss from issuance office inventories (which might be indistinguishable from accidental overissuance) were the only significant (although small) sources of loss of coupons in production and handling during the cash-out demonstration period.[9] Table XII.2 shows that the cost of coupons overissued or lost from inventory in the 12 demonstration counties was less than $0.01 per case-month.

[9]Coupons can be lost or stolen during production, shipment, or storage. However, Kirlin et al. (1990) estimate that coupon thefts from printing companies and storage locations are quite rare, amounting to less than 0.001 percent of benefits, and are usually recovered or covered by insurance.

TABLE XII.2

COUPON OVERISSUANCE AND LOSS FROM INVENTORY
IN THE DEMONSTRATION COUNTIES,
MAY 1990 THROUGH OCTOBER 1990

Average Monthly Value of:	
Coupons issued	$8,359,706
Overissuance and loss from inventory	$389
Average Monthly Caseload[a]	48,979
Cost per Case-Month of Overissuance and Loss from Inventory	<$0.01

SOURCE: Alabama FNS-250 reports.

NOTE: Includes loss in all 12 cash-out counties. Both monthly averages are for May 1990 through October 1990.

[a]Includes coupon households only.

FNS = Food and Nutrition Service.

b. Cash Benefits

In principle, thefts of blank warrants could occur during production, handling, or storage. However, according to state officials, Alabama maintains careful control over all checks and has a numbering and tracking system that virtually precludes any loss of blank checks. No thefts of blank warrants occurred during the demonstration period. Thus, it is unlikely that blank warrants would be stolen in Alabama, and we estimate loss from thefts of blank warrants to be zero.

2. Duplicate Issuances

a. Coupon Benefits

Duplicate issuance rarely, if ever, occurs in Alabama, because the centralized automated client data system is updated immediately when benefits are issued. In the rare event that duplicate issuance does occur (for instance, when the automated system is down), administrative claims against the client for repayment are made when the error is discovered, and repayment is generally obtained. We estimate loss in this area to be zero.

b. Cash Benefits

Early in the demonstration, during the first two months of cash-out, 17 duplicate checks were inadvertently issued; however, after the information systems staff modified the check-issuance computer programs, no other duplicate issuance occurred. The 17 duplicate checks were returned to the food stamp offices by the clients, and the state suffered no loss. Therefore, we estimate check-issuance loss from this source to be zero.

3. Loss in the Mail

Under Alabama's issuance systems, because mail issuance is more vulnerable than over-the-counter issuance to loss, the mail issuance of coupons is generally restricted to cases with small allotments. However, during the cash-out demonstration, all checks were mailed, regardless of allotment amount. Consequently, the average benefit amounts for the coupon mail issuances ($56)

and check mail issuances ($180) differed substantially, confounding comparison of mail loss under the two systems.

a. Coupon Benefits

A small amount of mail loss of coupons occurred in the research counties during cash-out. Table XII.3 shows that, in the 12 research counties during the eight months of cash-out, May through December of 1990, 32 out of 30,296 coupon mail issuances were reported lost in the mail. The value of the coupons lost in the mail and replaced in these counties was $1,469, or 0.09 percent of the total value of coupons issued through the mail ($1,709,136). This loss amounted to $0.05 per case-month (based on the mail-issuance caseload) and was borne by the federal government, because it was within the mail-loss tolerance level (see Section A).

b. Check Benefits

Table XII.3 shows that, of the 16,737 cash-out warrants issued during the Alabama Cash-Out Demonstration, 36 were reported not received or not cashed by the authorized client. One of the 36 checks was returned to the Food Stamp Accounting Office in the mail and was remailed to the client, and one check was not replaced because the client later acknowledged cashing the check. Twenty-two checks were voided before being cashed and caused no loss to the governments, clients, or third parties (and are not shown as a loss in Table XII.3).[10] According to the affidavits signed by the clients, the remaining 12 of the 36 checks were cashed by someone other than the authorized client. As shown in Table XII.3, these checks represent a loss, because replacement checks were issued to the clients. The value of the loss was $2,285, which was 0.08 percent of the total value of the checks issued ($3,016,832); this loss amounted to $0.14 per case-month and was borne by the banks or stores that cashed the checks.

[10]New checks were issued to the clients; these 22 new checks were called "duplicate checks" by the Alabama Food Stamp Division.

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TABLE XII.3

LOSSES OF MAILED COUPON AND CHECK BENEFITS IN THE DEMONSTRATION COUNTIES, MAY 1990 THROUGH DECEMBER 1990

	Type of Mailed Benefit	
	Coupon	Check
Percentage of Aggregate Dollar Amount of Mail Issuance Lost and Replaced		
Aggregate Dollar Amount of Mail Issuance	$1,709,136	$3,016,832
Aggregate Dollar Amount Lost and Replaced	$1,469 [a]	$2,285 [b]
Percentage Lost and Replaced	0.09 %	0.08 %
Percentage of Total Number of Mail Issuances Lost and Replaced		
Total Number of Mail Issuances	30,296	16,737
Total Number Reported Lost	32	36
Total Number Replaced	32	12
Percentage Lost and Replaced	0.11 %	0.07 %
Dollar Amount of Mail-Issuance Loss per Case-Month		
Average Amount of Mailed Benefit[c]	$56	$180
Average Amount of Lost and Replaced Benefit	$46	$190
Average Number of Issuances per Month	3,787	2,092
Average Amount of Loss per Month	$184	$286
Loss per Case-Month[d]	$0.05	$0.14

SOURCE: Alabama FNS-46 and FNS-259 reports; Food Stamp Division tabulations.

NOTE: Includes issuances and losses in the 12 cash-out counties only. Comparisons between coupon- and cash-issuance losses should be made cautiously due to the difference in the average amount of mailed coupon benefits versus mailed cash benefits.

[a]This loss was borne by the federal government.

[b]This loss was borne by the financial institutions that cashed the checks.

[c]To minimize loss, mail issuance for *coupons* is generally restricted to small allotments. However, all *checks* were mailed, regardless of the amount of the allotment. Thus, the average amount of mailed coupon benefits is substantially smaller than the average amount of (mailed) check benefits.

[d]Based on mail-issuance households only.

FNS = Food and Nutrition Service.

Three measures of mail loss can be used to compare coupon and check issuances (Table XII.3): (1) the percentage of the aggregate dollar amount of mail-issuance that was lost and replaced (which was less than 0.1 percent under both coupon issuance and check issuance), (2) the percentage of the total number of mail issuances that was lost and replaced (which was lower under check issuance), and (3) the dollar amount of mail-issuance loss per case-month (which was higher under check issuance). The first two measures suggest that mail issuance of check benefits may be somewhat more secure than mail issuance of coupon benefits. The higher loss per mail-issuance-case-month under check issuance relative to coupon issuance ($0.14, compared with $0.05) appears to be a result of a much larger average mail issuance amount under check issuance ($180 per check issuance, compared with $56 per coupon issuance), rather than a greater vulnerability of mail-issued checks.[11]

D. LOSS TO CLIENTS

Cash-out has the potential to reduce the loss of benefits by clients after the benefits are received. Although our data are insufficient to determine precisely the differential losses under the check-issuance and coupon-issuance systems, we can use the information that does exist to obtain an indication of the potential impact of cash-out on client loss.

1. Coupon Benefits

Clients cannot obtain replacements for lost or stolen coupons; therefore, such losses do not add to the program costs to the government. However, lost or stolen coupons do represent a loss borne by the clients. In addition, research suggests that, when clients use coupons, some food retailers may

[11]We calculated coupon mail loss as a percentage of total coupon mail issuance by dividing the coupon-issuance amount lost in the mail and replaced, by the total coupon mail-issuance amount, and multiplying by 100. We calculated the corresponding figure for check issuance by dividing the total check-issuance amount lost in the mail and replaced, by the total check-issuance amount (all of which was mailed), and multiplying by 100. The losses per case-month were obtained by dividing the average amount of loss per month during May through December 1990 by the average caseload size per month. The losses were calculated separately for coupon and check issuance and were based on the mail-issuance caseload only.

overcharge them for their food purchases.[12] We have no direct data on the amount of these types of loss in Alabama. However, in the Alabama focus group discussions, some participants reported that their food stamp coupons had been lost or stolen, and the inability to receive replacement coupons was viewed as a disadvantage of coupon issuance. Focus group participants also mentioned overcharging by retailers as a disadvantage of coupons.

2. Check Benefits

During the Alabama Cash-Out Demonstration, no checks were reported lost by or stolen from clients after being received but before being endorsed and cashed; all reported losses occurred before the clients received the checks. However, if a check had been reported lost by or stolen from a client after being received but before being endorsed and cashed, it would have been replaced, resulting in no loss to the client. (As discussed previously, if the original check had then been cashed by an unauthorized person, the loss would have been borne by the institution that had cashed the check, rather than by the state or federal government.) If the benefits had been lost or stolen after the client had cashed the check, the benefits would not have been replaced and, therefore, would not have added to program costs. However, these losses would have diverted benefits from program goals. Although the loss in this case would have been borne by the client, the amount might have been unmeasurable, as cash obtained from cashing a food stamp check would probably have been intermingled with other cash, and the loss or theft of "food cash" would not have been distinguishable from the loss or theft of other cash.

The retailer overcharging mentioned by focus group participants as a disadvantage of coupons is effectively eliminated under check issuance.

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[12]Kirlin et al. (1990) estimate that benefit losses due to coupon theft or loss amount to 0.54 percent of benefits, and benefits lost by grocers overcharging amount to 0.11 percent of benefits. Together, these two sources of client loss represent $0.86 in benefits per case-month. The estimates of Kirlin et al. are based on two surveys of coupon recipients that were conducted in one Pennsylvania county in 1985.

E. LOSS TO THIRD PARTIES

Under coupon issuance, third parties, such as banks and stores, are not subject to direct vulnerability to financial loss due to the fraudulent redemption of benefits. However, because Alabama law places the responsibility for fraudulently cashed state warrants with the financial institutions that cash the warrants, institutions that cashed fraudulently endorsed checks experienced some loss under cash-out. As shown in Table XII.3, according to the affidavits signed by the clients, of the 16,737 cash-out warrants issued, 12 were fraudulently cashed by individuals other than the authorized clients. The total amount of lost benefits amounted to $2,285, and was attributed to loss in the mail.

The loss from the 12 checks was borne by the financial institutions that cashed them. In these cases, after the client had signed an affidavit stating that the check had not been endorsed and that the benefits had not been received by the authorized payee, the Alabama Treasurer notified the financial institution that had cashed the check. The financial institution then sent a cashier's check for the amount of the original warrant to the Treasurer's Office, and the Treasurer sent the cashier's check to the client.[13]

F. SUMMARY

Overall loss in Alabama's coupon-issuance system was quite low during the period of the cash-out demonstration. Under cash-out, some types of losses decreased or were eliminated, and other types increased but shifted from the state and federal governments and the food stamp clients to third parties, such as banks and stores. Table XII.4 summarizes issuance-system loss during cash-out. The results of the Alabama Cash-Out Demonstration indicate that:

- Cash issuance in Alabama virtually eliminated losses that add to program costs borne by the state or federal government. Under cash-out, losses from theft during coupon production, shipment, and storage; from overissuances caused by clerical

[13]The 12 checks were called "replacement checks" by the Alabama Food Stamp Division.

TABLE XII.4

ISSUANCE SYSTEM LOSS IN THE ALABAMA CASH-OUT DEMONSTRATION

Type of Loss	Loss per Case-Month (Dollars)		Who Paid for or Bore the Loss	
	Coupons	Checks	Coupons	Checks
Loss in Production and Handling	<0.01	0	State Government	
Duplicate Issuances	0	0		
Loss in the Mail	0.05	0.14	Federal Government[a]	Banks and Other Check-Cashing Institutions[b]
Benefits Lost by or Stolen from Clients after Being Received	0.86	0[c]	Clients	

SOURCE: Data on all check loss and on coupon loss during production and handling, through duplicate issuances, and in the mail are from the Evaluation of the Alabama Food Stamp Cash-Out Demonstration. Other data are from Kirlin et al. (1990).

[a]The federal government absorbed these losses because they were below the tolerance level of 0.5 percent of the dollar value of the coupons issued. The state absorbs losses above the tolerance level.

[b]In these cases, the clients had not received the checks. Thus, the financial institutions that cashed the fraudulently endorsed checks bore the loss.

[c]Food stamp checks that were lost or stolen after being received by clients but before being cashed could be replaced, thus eliminating these sources of loss. However, the cash proceeds from food stamp checks were vulnerable to loss and theft. No information is available on the incidence or amounts of any such losses that might have been experienced by check recipients in Alabama.

error; and, potentially, from excessive issuance due to the fraudulent use of ATP cards were eliminated. However, these types of losses are quite small under the coupon-issuance system, thus precluding the possibility that a check-issuance system might achieve substantial cost savings in this area.

- Losses borne by third parties, such as banks and stores, increased substantially under cash-out because (1) all cash-out checks were issued by mail, and mail issuance is vulnerable to theft and loss, and (2) in Alabama, under coupon issuance, the government bears the cost of mail loss, but the financial institutions that cashed fraudulently endorsed checks bore the loss under check issuance. When measured as a percentage of total benefits issued, the amount of mail loss under the check-issuance and coupon-issuance systems differed little; under both systems, less than 0.1 percent of the total issuance amount was lost and replaced. However, when measured on a per-case-month basis, mail loss was $0.05 under the coupon-issuance system and $0.14 under the check-issuance system. The higher per-case-month loss under cash-out was primarily a function of the much higher average allotment of the mailed checks compared with the mailed coupons. Mail issuance of coupons in Alabama is generally restricted to small allotments.

- Losses borne by food stamp clients appear to have declined under cash-out, because checks that were lost or stolen before being endorsed and cashed could be replaced, whereas coupons that are lost or stolen after being received by the client are not replaced. In addition, check recipients were less likely to be subject to possible overcharging of food stamp recipients by some food retailers.

Therefore, under cash-out, costs to the government from losses during production, shipment, and storage and from overissuance declined; as did costs to clients associated with theft and loss of coupons. However, the greater security of checks was offset by a higher use of mail issuance, which is more vulnerable than over-the-counter issuance to loss, and a higher average mailed benefit amount. The cost associated with the mail loss of checks was borne by third parties, such as banks and stores.

XIII. CONCLUSIONS

Volume I of this two-volume report on the evaluation of the Alabama Food Stamp Cash-Out Demonstration presented findings from the evaluation on the effects of cash-out on food stamp recipients and their food-use and spending patterns. Volume II of this report has presented findings on the planning and implementation of the demonstration and on the effects of cash-out on Food Stamp Program (FSP) administrative costs and benefit losses. This concluding chapter discusses the policy implications of the findings.

A. IMPLICATIONS OF THE FINDINGS ON RECIPIENT IMPACTS

A chief concern expressed by opponents of cash-out is that converting the benefit form from coupons to checks would weaken the link between FSP benefits and food consumption, thereby reducing the program's ability to accomplish its objective of "raising the levels of nutrition among low-income households." Data from this evaluation's survey of food stamp households do not support this concern. According to the survey's principal measures of household food expenditures and availability of nutrients, cash-out did not reduce the effectiveness of the FSP in accomplishing its nutritional objective.

Tabulations of the household survey data show that, in Alabama, the money value of food used at home was virtually identical for recipients of food stamp checks and recipients of food stamp coupons. The mean values of this key outcome measure differed between the two groups of recipients by less than 1 percent. That difference is far from being statistically significant.

A similar picture emerges when the effects of cash-out on nutrient availability are considered. We analyzed the availability of food energy, protein, and seven micronutrients that are a public health concern. None of the differences between check and coupon households in the mean availabilities of these nutrients exceeded 3 percent (most were in the neighborhood of 1 percent or less), and none of the differences is statistically significant. The differences in the percentages of check and coupon

recipients for which the availability of food energy, protein, and the seven selected micronutrients equaled or exceeded the recommended dietary allowances were also very small and statistically insignificant.

The survey obtained no information suggesting that cash-out increased the likelihood that households did not have sufficient food to eat. Roughly 20 percent of the food stamp recipients who were surveyed reported that their households had not had enough food during the month preceding the survey, and about 10 percent reported that some household members had skipped meals because of this problem. Nevertheless, the incidences of these problems were actually greater among coupon recipients than among check recipients, although the differences are not statistically significant.

Food stamp recipients liked receiving their program benefits in the form of checks, rather than in the form of coupons. Participants in focus group discussions that we conducted in one urban county and in one rural county in Alabama voiced a strong preference for checks. They preferred the check form because checks can be used to purchase nonfood necessities, such as soap, paper products, and medicine; it is more convenient to receive a check by mail than it is to pick up coupons at the food stamp office; and there is less stigma associated with receiving and using check benefits. Responses to a series of questions in the household survey also indicated that a substantial majority of check recipients preferred the check form of benefit.

In summary, the findings from the household survey indicate that the impacts of cash-out on food stamp recipients in Alabama were negligible in terms of the money value of food used at home, the availability of nutrients, and the perceptions of households regarding the adequacy of their home food supplies. Furthermore, the survey, as well as focus group discussions with households that had received food stamp benefits in both coupon and check form, provide strong evidence that households prefer to receive food stamp benefits in the form of checks.

B. IMPLICATIONS OF THE FINDINGS ON ADMINISTRATIVE OUTCOMES

Much of the support for food stamp cash-out derives from expectations that it will (1) reduce FSP administrative costs by streamlining the benefit-issuance and redemption processes, and (2) reduce benefit loss by providing greater security for benefits and by eliminating several steps in the issuance process. The findings from the evaluation on administrative outcomes provide evidence that cash-out, as operated in Alabama, did reduce administrative costs, but did not reduce benefit loss. In this section, we discuss our findings on the impacts of cash-out in these two areas, as well as important lessons learned from the implementation and operation of the demonstration.

1. Administrative Costs

The replacement of food stamp coupons with food stamp checks would eliminate or reduce many state and federal administrative costs that are associated with issuance systems such as that in Alabama. For example, the costs of storing and transporting coupons would be eliminated, as would the costs of authorizing and monitoring retailers. The costs of delivering food stamp benefits to recipients would be substantially reduced due to the adoption of streamlined and less labor-intensive procedures, such as the replacement of over-the-counter issuance with mail issuance. Some new administrative costs would be incurred, such as costs associated with the printing, production, issuance, and reconciliation of checks. However, in our analysis of the administrative costs of the Alabama Food Stamp Cash-Out Demonstration, we found that, overall, the cost of check issuance was about one-half that of coupon issuance; the costs per case-month of check and coupon issuance were, respectively, $1.03 and $2.05. Factoring in federal sharing of issuance costs incurred at the county and state levels, three-quarters of the savings in issuance costs accrued to the federal government, and the remaining one-quarter accrued to the state government.

2. Benefit Loss

Under cash-out, costs to the state and federal governments from losses during the production, shipment, and storage of coupons, and from losses due to overissuance were eliminated. However, these losses are so small under the coupon-issuance system that their elimination under cash-out did not result in substantial cost savings. Another type of loss, mail loss, was borne by the state and federal governments under coupon issuance; however, under check issuance, this type of cost shifted to third parties, such as banks and stores, which cashed fraudulently endorsed checks that had been lost or stolen in the mail.

The per-case-month cost of mail loss was actually higher under cash-out ($0.14) than under coupon issuance ($0.05). As noted previously, under check issuance, the cost of mail loss shifted from the state and federal governments to third parties. The higher per-case-month mail loss under cash-out was primarily a result of the fact that all check benefits were mailed, whereas only coupon benefits of low value were mailed.

Losses borne by food stamp recipients might have declined under cash-out because recipients could obtain replacements for checks that had been lost or stolen before being endorsed and cashed; lost or stolen food coupons could not be replaced. However, the available data do not allow us to measure this type of loss. In addition, check recipients were less likely to be subject to possible overcharging of food stamp recipients by some food retailers.

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3. Planning and Implementation

With the exception of the development of the automated check-issuance system, the planning and implementation of cash-out in Alabama went smoothly, largely because the Commissioner of the Alabama Department of Human Resources (DHR) systematically laid the groundwork for the demonstration. That groundwork included the promotion of welfare reform through hearings, meetings, and personal contact with state workers, legislators, county DHR directors, food retailers, directors of advocacy groups, and other concerned persons. In addition, an important factor behind the smooth implementation of cash-out was the training and support that DHR provided to its county and state staff.

The development of the automated check-issuance system (primarily in the form of computer software) posed a major challenge in implementing the demonstration. It required more DHR and contractor staff resources and took more calendar time than was originally anticipated, thus contributing to a four-month delay in the commencement of cash-out. Development of the software was complicated by two factors: (1) Alabama was implementing two related demonstration programs simultaneously ("pure" cash-out and the ASSETS welfare-reform demonstration program, of which cash-out was a component), and (2) the development of the cash-out automated check-issuance system commenced before the evaluator of the pure cash-out demonstration was selected, resulting in the need to modify some of the early work to fit the needs of the evaluation.

C. GENERALIZING THE FINDINGS

The principal findings from the evaluation of the Alabama Food Stamp Cash-Out Demonstration are that cash-out in Alabama reduced the cost of issuing food stamp benefits by one-half, but did not reduce the effectiveness of the FSP in accomplishing its nutritional objectives. In addition, food stamp participants preferred receiving their benefits in the form of checks rather than coupons.

However, Alabama differs from much of the rest of the United States along a number of important dimensions, and these differences reduce the degree to which the results of this

demonstration can be generalized to other areas of the United States. Unique features of the way in which cash-out was implemented in this demonstration, such as the brief (eight months) duration of cash-issuance, may also limit the extent to which these results can be generalized. The findings from the Alabama Food Stamp Cash-Out Demonstration should be considered in conjunction with findings from a similar demonstration in San Diego County, California. In San Diego, cash-out resulted in reductions in several measures of household food use ranging from 5 percent to 8 percent. (The analysis of cash-out's impact on administrative costs and benefit losses in San Diego has not been completed.) Together, the results of the two demonstrations suggest that the impact of cash-out on recipients depends, at least in part, on the context in which cash-out is introduced and on the precise way that it is implemented.

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APPENDIX A

PROCEDURES USED IN THE HOUSEHOLD SURVEY

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This appendix describes the household survey that was undertaken for the evaluation of the Alabama Food Stamp Cash-Out Demonstration.

A. METHODS FOR SELECTING AND LOCATING RESPONDENTS

MPR completed a total of 2,386 interviews with food stamp recipients in Alabama during a 15-week period that began the second week of August 1990 and ended the third week of November 1990. The field period ended before the Thanksgiving holiday, when food consumption and expenditure habits were likely to be atypical of respondents' customary eating and spending patterns. Of the total completed interviews, 1,131 interviews were completed with coupon recipients and 1,255 were completed with check recipients.

This section defines the study area, describes the respondents included in the survey sample, and discusses methods used to locate and contact respondents. Screening criteria and the definition of the food manager (the respondent for the main interview) are also addressed.

1. Defining the Study Area

Twelve counties participated in Alabama's pure food stamp cash-out demonstration. They were selected with the objective of drawing independent, equal-sized samples of the caseloads of Alabama's urban and rural counties. To that end, the counties were stratified by urbanicity (large urban, medium-sized urban, and rural) and, for rural counties only, by geographic region (north, central, and south).

Not all of Alabama's 67 counties were available to participate in the cash-out demonstration. Six counties (two medium-sized urban counties and four rural counties) were excluded from the sampling frame because they had been selected to participate in Alabama's comprehensive welfare reform demonstration program, ASSETS. The State of Alabama excluded an additional five rural counties from participating in the demonstration for administrative reasons. Thus, the sampling frame for the pure food stamp cash-out demonstration consisted of 56 counties: 2 large urban counties, 4

medium-sized rural counties, 17 northern rural counties, 21 central rural counties, and 12 southern rural counties.

From each of the sampling frame's two urban strata, one county was selected into the demonstration with probability of selection proportional to caseload size. This selection resulted in the selection of Jefferson (Birmingham) and Montgomery Counties. From the three rural strata, four northern counties (Dekalb, Fayette, Lauderdale, and Marion), four central counties (Choctaw, Clay, Pickens, and Dallas), and two southern counties (Conecuh and Dale) were selected, also with probabilities proportional to caseload size.

2. Selecting Respondents for Inclusion in the Sample

One-half of the interviews were to be completed with Food Stamp Program (FSP) recipients from urban counties, and one-half were to be completed with FSP recipients from rural counties. In addition, one-half of the completed interviews were to be completed with FSP recipients who receive cashed-out food benefits; the other one-half were to be completed with recipients who continued to receive their benefits in coupon form. Furthermore, the sample was to be selected such that long-term food stamp recipients would not be over-represented.

The selection of cases into the demonstration occurred in two phases: (1) the initial draw, and (2) the supplemental draw. The initial draw took place at the end of April, just prior to the first issuance of cashed-out benefits on May 1, 1990. Supplemental cases were selected into the demonstration from the time of the initial draw until August 31, 1990. All experimental and control cases that were active FSP participants at the end of June were selected into the sample for the household survey. This sample was subsequently augmented with cases that had entered the FSP (and had been selected into the demonstration) after June 30 and were active FSP participants on August 31. The supplemental sample cases ensured that the FSP recipients who were interviewed at the end of the field period had the same distribution with regard to the length of time that food benefits had been received as had those who were interviewed at the beginning of the field period.

Initial sample cases were released to survey field staff early in August of 1990; supplemental sample cases were released early in October. To ensure that the field staff worked the sample efficiently and objectively, that is, to ensure that they did not attempt to interview the "easy" cases first, leaving only difficult cases to be interviewed at the end of the field period, the sample was randomly assigned to at least six, and to as many as nine, lots per county. Some rural counties with small FSP caseloads had fewer than nine lots. Only cases from lots 1 through 3 were initially assigned to supervisors for distribution to interviewers. Interviewers could not work on lots 2 or 3 until all of lot 1 had been worked thoroughly. Each successive lot could only be worked when the previous lot had been completed.

3. Obtaining Contact Information for Respondents

The data tape prepared by the Alabama Department of Human Resources (DHR) contained home addresses and telephone numbers for the FSP recipients selected into the sample frame. Telephone numbers, when available, were extracted from hard-copy program files. In most instances, FSP caseworkers retrieved the telephone numbers. In some counties, MPR field staff assisted in telephone-number retrieval. This contact information was used in the initial attempt to locate a sampled person (that is, the person in whose name a household's food stamp benefit was issued). If the sampled person had moved, interviewers used other locating techniques, such as searches via directory assistance, in-person follow-ups with neighbors and relatives, or searches made by DHR staff through FSP files for an address update. DHR assistance was requested only after all other leads had been exhausted. The MPR field coordinator and the field supervisors coordinated the searches for contact information.

4. Screening Criteria

Participation in the FSP was used as a screen criterion in the screening interview. Specifically, a sampled person was eligible to participate in the survey if he or she had received food stamp

benefits in the month preceding the screening interview and expected to receive benefits in the next month. If the sampled person responded negatively to either one of these questions, that household was terminated from the study. In theory, if the sampled person had reported that his or her food stamp benefit was in a form different from that recorded on the sample, the information would have been recorded and the household would have remained in the sample. However, in practice, this situation did not occur.

Respondents who no longer resided in the county in which they had resided when the sample was drawn were not eligible to participate in the study, even if they had moved to another county participating in the demonstration. Of the 480 cases that proved to be ineligible to participate in the study (that is, that did not meet the screening criteria), 25 were ineligible because the respondent was deceased, 89 were ineligible because respondents had moved out of the county, and 366 were ineligible because they were no longer receiving FSP benefits.

5. Defining and Identifying the Food Manager

The food manager was the person in the sampled person's household who had primary responsibility for purchasing food and preparing meals. Although the interviewer had to conduct the initial portion of the screening interview with the sampled person, the food manager was the preferred respondent for the main interview. The food manager was identified during the telephone introduction to the screening interview. If the sampled person and the food manager were the same person, the interviewer made an appointment to complete the screening interview. If the sampled person and the food manager were two different persons, an appointment was made with both of them. During the screening interview, the sampled person was asked the screening criteria, described previously. The second half of the screener and the main food-use questionnaire were administered to the food manager.

B. SELECTION AND TRAINING OF FIELD STAFF

This section addresses the selection of the 11 field supervisors, the recruitment and hiring of the field interviewers, and the interviewer training procedures and materials.

1. Recruiting and Training Supervisors

Eleven field supervisors were hired to oversee the hiring and management of the staff of field interviewers. The supervisors were selected on the basis of a satisfactory prior work history with MPR, or recommendations from their supervisors in projects with other contractors. All but four supervisors were located in Birmingham, because we were unable to locate experienced supervisors in the rural demonstration counties. Three supervisors were assigned to manage Jefferson County. Two supervisors managed Montgomery, including one supervisor who lived in Montgomery County, and the remainder managed one or more rural counties. One supervisor was given a lead field coordinator assignment. In addition to managing field interviewers in two rural counties, she was responsible for managing four of the least experienced field supervisors.

Before the five-day interviewer training seminar began, the supervisors attended a two-day training seminar. The objectives of the two-day seminar were to familiarize the supervisors with the sample management needs of the project; instruct supervisors in their "housekeeping" responsibilities, such as reporting forms and other paperwork requirements; and give supervisors a mini-class on the survey instruments. This supervisor training proved to be invaluable in managing such a large field effort, because it allowed the supervisors to use their time more effectively during the interviewer training week. They were able to assign sample pieces to field interviewers more knowledgeably from a geographical standpoint and to develop better working relationships with their interviewers than they would have had they, and the interviewers, been hearing the information for the first time. The supervisors were also able to be more helpful in their roles as assistant trainers during mock interviews and other training exercises.

2. Recruiting and Hiring Interviewers

To hire field interviewers, newspaper advertisements were run in Alabama newspapers. The advertisements explained the study, stressed the need for a car and a telephone, and offered a higher hourly rate for experienced interviewers. Because interviewer attrition was anticipated and the field period was short, hiring goals were set high. Specifically, we recognized that, given the lengthy and in-depth training session required, rehiring and retraining during the 15-week field period would be highly inefficient. We initially hired and trained 156 interviewers.

Attrition of field interviewers occurred during the study for several reasons. Some interviewers decided that they were not interested in the survey after they had begun interviewing. Others were selected out because of problems with the quality of the data that they were collecting or because of low productivity. Interviewers had to pass a quality-control edit. They returned their first case to MPR by Federal Express, so that their work could be reviewed in a timely manner. Interviewers were not to continue working until their first completed case had been reviewed. However, because of the complexity of scheduling the screening interview and the main interview, some interviewers actually completed more than one case before receiving quality-control feedback. Fortunately, this did not pose any problems. Most of the problems that we uncovered during this initial quality-control review were easily corrected, and only one interviewer in Montgomery County was rejected as a result of the quality-control process. Table A.1 breaks down interviewer attrition, by week. As the survey progressed, the more productive interviewers were assigned new cases, but the less productive interviewers were not. No new hiring or retraining was necessary.

3. Training Materials and Procedures

Interviewer training took place in two stages. First, after being formally hired, the interviewers were sent advance study materials. Second, all interviewers were required to attend the five-day training seminar, which was held at the Mountainbrook Inn in Mountainbrook (Jefferson County), Alabama.

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TABLE A.1

INTERVIEWER ATTRITION

Time Period	Number of Interviewers
Initially Hired	156
Passed Training	138
Worked Week 1	138
Worked Week 2	125
Worked Week 3	125
Worked Week 4	125
Worked Week 5	121
Worked Week 6	121
Worked Week 7	117
Worked Week 8	106
Worked Week 9	91
Worked Week 10	82
Worked Week 11	76
Worked Week 12	70
Worked Week 13	63
Worked Week 14	53
Worked Week 15	44

SOURCE: Administrative records from the Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

The advance study materials included:

- An overview of the study materials
- An introduction to the study, the data collection process, and the study team
- Instruction on general interviewing techniques, including avoiding bias, proper probing, establishing rapport and gaining cooperation, and questionnaire and recording conventions
- A hypothetical, day-by-day, life cycle of a typical case
- A glossary of study-specific terms, to be learned before training was begun

The advance study materials also included a written probing exercise, which each interviewer was required to complete after reviewing the manual and to return to MPR before training.

The second stage of training was the in-depth training seminar, which was held over a five-day period in the week before the official beginning of the field period. To be qualified to receive cases, interviewers had to attend all five sessions and, through written and oral exercises at the end of training, to demonstrate knowledge of all aspects of the survey procedures. One session was covered during each day of the training period, and each trainer received a detailed training agenda listing the items to be covered in each session. The sessions contained a mixture of training techniques, including lectures, videos, written exercises, round-robin mock interviews, and one-on-one practice. The sessions were organized as follows:

Session I--Introduction to the Study, General Interviewing Skills, and Conducting the Screening Interview. Training techniques included: a general interviewer training video, written probing and recording exercises, and round-robin and one-on-one mock interviews with the screener. Length: 6 hours.

Session II--Conducting the Income and Expenditures Module of the Questionnaire. Training techniques included: a question-by-question review of the section and auxiliary materials to be used,

a written matching exercise on the definition of income sources, and round-robin and one-on-one mock interviews with that section of the questionnaire. Length: 5 hours.

Session III--Conducting the Food-Use Interview (Part I). Training techniques included: a question-by-question overview, review of the recipe page, an audio-taped example of the section, and round-robin and one-on-one mock interviews. Length: 5 hours.

Session IV--Conducting the Food-Use Interview (Part II). Training techniques included: a question-by-question overview, review of the shopping form, a written exercise on recording food use correctly, and round-robin and one-on-one mock interviews. Length: 5 hours.

Session V--Review of the Interview Process and Administrative Training. Training techniques included: a step-by-step review of the interview process and all auxiliary materials, a written exercise on gaining respondent cooperation and using the record-of-contacts form, a written exercise on searching for hard-to-locate sampled persons, and instruction on administrative responsibilities. Length: 4 hours.

C. METHODS FOR COLLECTING THE DATA

The data collection effort was conducted so as to minimize respondent burden and maximize the quality of the food-use data. This section discusses the survey process and illustrates how the timing of the field period; the use of the multiple-contact approach, recall aids, and respondent payments; and attention to special circumstances, contributed to the successful completion of the survey.

1. Timing of the Field Period

Interviewers were given their first ten cases to work at the conclusion of interviewer training on August 3, 1990. Given the seven-day lag between completion of the screening interview and the main interview, completed questionnaires arrived at MPR in mid-August. The field period concluded the

TABLE A.2

COMPLETIONS OF SCREENING INTERVIEWS AND MAIN INTERVIEWS, BY WEEK OF FIELD PERIOD

Time Period	Percent of Screening Interviews Completed (N=2,989)	Percent of Main Interviews Completed (N=2,386)
Week 1	11.0	0.0
Week 2	5.5	10.1
Week 3	10.0	6.4
Week 4	9.7	9.4
Week 5	11.0	9.5
Week 6	11.0	10.6
Week 7	9.5	10.7
Week 8	7.5	9.6
Week 9	5.1	8.7
Week 10	3.2	5.7
Week 11	2.4	3.8
Week 12	5.0	2.3
Week 13	3.5	4.8
Week 14	5.5	2.7
Week 15	0.0	6.4
Total	100.0	100.0

SOURCE: Administrative records from the Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

2. Multiple-Contact Approach

To gain and maintain respondent cooperation, a multiple-contact approach was used. This approach eased the sampled person into the survey process and maintained interviewer and respondent interaction from the time of the initial contact through the screening interview, recordkeeping, and completion of the main interview.

The first contact that a sampled person received from MPR was an advance letter. This letter explained the purpose of the study, described what would be expected of a respondent, explained the incentive payment, stressed confidentiality, and emphasized that food stamp benefits would not be affected by participation or nonparticipation in the survey. The advance letter also contained the name and telephone number of the MPR survey director and encouraged the sampled person to contact local food stamp offices if he or she had questions. In addition, a fact sheet on the back of the letter provided basic questions that the sampled person may have had, and answered the questions.

The second contact was a telephone call from an MPR field interviewer to set up an appointment with the sampled person and the food manager (if they were different persons) to conduct the screening interview. The interviewer conducted the screening interview in person at the sampled person's residence, usually within two days of the initial telephone contact. At that time, the interviewer completed the screening interview, made an appointment to conduct the main interview, and explained to the food manager how to keep a record of the foods used in the household during the seven days immediately preceding the main interview.

The third contact was a postcard that was mailed midway during the week following the screening interview. The postcard contained a personal note from the interviewer reminding the respondent of the appointed time and date for the main interview and encouraging accurate recordkeeping. The last contact between the interviewer and the sampled person was the in-person administration (using a hard-copy instrument and a pencil) of the main survey instrument.

3. Recall Aids

To further reduce the burden on the sampled person and to minimize error, the interviewer gave the food manager several recall and scheduling materials at the screening interview. The materials, which were designed to help the food manager keep track of the foods used, included:

- A calendar page showing the food manager when to begin and when to stop tracking food
- A letter providing instructions for keeping track of the foods used during the seven-day period
- An envelope in which to store receipts and on which to record food-use information
- A clip-magnet to attach the envelope to the refrigerator, if desired, and a ball point pen to write on the envelope
- A business card with the telephone number of an MPR representative, in case the food manager had questions or concerns after the interviewer left

4. Incentive Payment

To offset the respondent burden, an incentive payment was made to the sampled persons who fully participated in the survey. At the end of a successfully completed interview, the interviewer gave the sampled person a check from MPR in the amount of $20.00. Because the sample population comprised low-income persons, many of whom might not have had bank accounts and who would have found cashing the incentive checks difficult or impossible, MPR arranged for The First Alabama Bank, which has offices throughout Alabama, to cash the checks. In addition to the incentive check, respondents were given a photocopy of a letter from an officer of the bank, indicating that the bank had agreed to cash the checks. If the sampled person presented valid identification, such as the FSP authorization-to-participate card, The First Alabama Bank cashed the check without charging the usual fee.

5. Special Circumstances

In rural counties in Alabama, households with at least one member aged 60 years or older comprise a large percentage of the food stamp caseload. In seven of the ten rural counties in the demonstration, more than 30 percent of the households that receive food stamps had at least one elderly member. We initially feared that some of these households might not be able to fully participate in the survey, either because the household members were too frail to comply with record keeping and interviewing requirements or because the members did not prepare enough meals at home. However, respondents in these households indicated that they were both willing and able to participate fully. When the food stamp recipient was too frail to prepare meals (and, hence, was not knowledgeable about the foods used), the food manager was identified, and food-use data were obtained from that person.

6. Field-Management Procedures

The data collection effort had a management plan commensurate with the numbers of staff involved. Each of the 140 field interviewers reported to 1 of the 11 field supervisors on a weekly basis. These weekly conferences covered any problems in locating sampled persons or successfully administering the questionnaire. The field supervisors also collected information vital to managing each interviewer's caseload efficiently and within budget; this information included the status of each case, the number of hours worked and miles traveled, and other expenses. Initially, six supervisors reported this information, by interviewer, directly to the MPR field coordinator on a weekly basis. Four other supervisors reported to the lead field supervisor, who lived in Birmingham. The lead supervisor reported to the MPR field coordinator on the field interviewers under her direct supervision, as well as on those under her indirect supervision. About halfway through the project, when sample management activities needed more hands-on coordination as the cases became more difficult to work, two of the Jefferson County supervisors were directed to report to a newly designated lead supervisor in Jefferson County; this supervisor, in turn, reported to the MPR field

coordinator. The MPR field coordinator maintained records on interviewer productivity and survey costs and reported to the survey director on a regular basis.

D. DATA PROCESSING AND QUALITY ASSURANCE

To ensure that the survey data would be of the highest possible quality, quality-control measures were implemented before, during, and after the data collection effort. This section discusses the routine quality-control procedures that MPR used on this survey, such as callbacks and validations, as well as special efforts undertaken to maximize the quality of the data.

1. Processing Completed Interviews

Interviewers were instructed to check for mistakes by reviewing their completed questionnaires after each interview. After performing this review, the interviewers sent the completed instruments for the screening interview and the main interview, along with the contact records, to MPR. They kept respondent recall materials for use in resolving problems that might arise during the quality-review edits. The completed questionnaires and screeners were reviewed by Princeton-based MPR quality-control personnel, who identified any problems requiring callbacks.

Seventy-nine percent of the main survey instruments required a callback to reconcile inconsistencies or to retrieve missing data. First, quality-control personnel attempted to resolve problems by asking the interviewer to look at the respondent's recall materials. If this procedure was unsuccessful, the respondent was called back by MPR's quality-control personnel or, if necessary, by an interviewer in Alabama. Of the questionnaires requiring a callback, 95 percent were resolved successfully.

To ensure the quality of this process, MPR's quality-control manager trained and monitored a staff of quality-control personnel, who worked exclusively on this study. The quality-assurance staff consisted of eight individuals. The manager trained the staff over a three-day period on the goals of the survey, a question-by-question review of the main questionnaire and screener, specific problem

areas, and how to edit the questionnaire and screener for overall internal consistency. After the staff was trained, the quality-control manager completely reviewed their first five questionnaires. Subsequently, the manager reviewed 10 percent of each person's work for the next four weeks. Finally, the manager reviewed all cases requiring a callback interview. These steps ensured that the questionnaires were edited in a thorough and consistent manner.

After cases were edited fully and callbacks were resolved, cases were sent to MPR's subcontractor, National Analysts, for data entry and processing of the food-use data. Cases were sent to National Analysts on a weekly basis.

2. Validation Procedures

Each respondent in the sample for the household survey was sent a postcard to validate the interview. MPR received 57 percent of these postcards back. The returned postcards identified one problem interviewer, whose reported interview administration time was consistently shorter than expected (20 minutes, rather than the usual 2 hours). Investigative phone calls with respondents and with the interviewer revealed that the interviewer was not following directions for collecting food-use data. The interviewer was dismissed because the errors were too egregious to be remedied by retraining. The problem cases were discarded, and additional sample pieces were released to replace them.

The callback process that we used to reconcile inconsistencies in completed questionnaires provided an additional opportunity to validate the survey. Irrespective of whether the respondent had returned a postcard, each respondent who received a data-clarification telephone callback was administered a short validation questionnaire.

E. RESPONSE RATES AND OTHER FINAL STATUSES

This section addresses the disposition of the sample, including the breakdown of eligible and ineligible cases, completed interviews, and all other final statuses.

1. Eligibility Rates

A total of 3,544 cases were released in the Alabama sample (Table A.3). Of these, 480 were defined as ineligible for the survey, leaving 3,064 eligible cases (86 percent of the total released). As mentioned previously, ineligibility was defined by one of three criteria: (1) deceased, (2) moved out of the study area, or (3) no longer receiving benefits. Slightly more coupon recipients than check recipients (253 versus 227) were ineligible.

2. Completion Rates

Table A.3 presents the survey-response rates for check recipients, coupon recipients, and all recipients (check and coupon combined). A total of 2,386 out of the 3,064 eligible cases from the sample frame list completed the household interview.[1] Thus, the overall response rate was 78 percent. A total of 1,131 interviews were completed with coupon recipients, and 1,255 with check recipients, yielding respective response rates of 76 percent and 80 percent.

Table A.3 also shows the final statuses of all eligible cases for which interviews were not completed, by coupon and check status. Refusals were the largest source of noncompletion; 10 percent of coupon recipients and 8 percent of check recipients refused to participate in the survey. Other sources of noncompletion include unlocatable sampled persons, exhausted attempts, physical or cognitive impairments, and language barriers. Table A.3 shows the disposition of every case that was a part of the sample for the Alabama household survey.

One aspect of these survey statistics warranting attention is the fact that, despite our original objective of interviewing equal numbers of demonstration and control clients, the final sample includes 124 more completions with check recipients than with coupon recipients (1,255 versus 1,131). An examination of Table A.3 shows that three main factors account for the different numbers of completions. First, fewer coupon than check households were released into the initial sample. The

[1]Not included among the 2,386 completed interviews are 60 questionnaires that were lost in the mail and 46 cases that were discarded for suspected fraud.

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TABLE A.3

RESPONSE RATES, BY TREATMENT AND CONTROL GROUPS

	Coupon Recipients		Check Recipients		Total	
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]
Total Cases Released	1,750		1,794		3,544	
Ineligible Cases	253		227		480	
Deceased	13		12		25	
Moved Out of County	60		29		89	
No Longer Receiving Benefits	180		186		366	
Eligible Cases	1,497	100	1,567	100	3,064	100
Completed Interview	1,131	76	1,255	80	2,386	78
Refused		10		8		9
Screener	97		79		176	
Interviewer	53		39		92	
Cannot Locate		3		3		3
Screener not completed	48		51		99	
After screener completed	1		0		1	
Exhausted Attempts		4		4		4
Screener not completed	49		37		86	
After screener completed	16		19		35	
Unable to Administer Screener		3		2		3
Physical or cognitive impairment	34		25		59	
Language barrier	1		0		1	
Other reasons	7		14		21	
Other Noncompletions		4		3		3
Completed instrument lost in mail	33		27		60	
Case discarded--suspected fraud	25		21		46	
Other reason for noncompletion	2		0		2	

SOURCE: Administrative records from the Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

[a]The denominator is the number of eligible cases.

procedure used to randomly release the sample cases to survey field staff was designed so that the *expected* numbers of coupon and check cases released would be the same. However, the procedure did not ensure that the *actual* numbers of cases released were the same for the two groups. As it happened, due to random chance, 44 more coupon cases than check cases were released.

The second reason for the different numbers of completions achieved between coupon and cash recipients is that 31 fewer check recipients than coupon recipients had moved out of their initial county of residence between the start of the demonstration and the survey. The lower incidence of moving by check recipients could have been a behavioral response to the demonstration. That is, check recipients may have been reluctant to make a cross-county move, because they knew that doing so would result in their reversion to the coupon form of food stamp benefits.

The third reason for differential completion rates, one that accounts for roughly one-half of the overall difference, is that interviewers found it more difficult to complete interviews with coupon recipients. This happened in several ways, including refusals, not being able to establish contact with the sample members, or not being able to administer the interviews due to physical or cognitive impairments. These factors may reflect a greater willingness on the part of check recipients, compared with coupon recipients, to cooperate with the survey. In particular, if check recipients liked receiving their food stamp benefits in that form (as the evidence presented in this report indicates was the case), they may have been more disposed to cooperate with field interviewers than were the coupon recipients.

In itself, the differential numbers of completed interviews pose no problem for the analysis--the loss in statistical precision resulting from slight departures from the ideal of equal numbers of check and coupon cases is very small. However, to the extent that the factors influencing attrition from the sample were correlated with the outcomes of interest, such as household food use, the possibility is raised of response rate bias, which could complicate interpretations of experimental versus control differences in the data.

The first of the three factors discussed above is random in nature and, hence, is very unlikely to have led to response bias. The other two factors may signal differences in survey response behaviors that could potentially lead to some response bias in the results. However, this danger must be assessed in the context of the high response rates that were achieved in the survey--76 percent for coupon recipients and 80 percent for check recipients. In light of these overall rates, it seems unlikely that any biases due to response rate differentials could have had a significant effect on the findings presented in the text of the report.

3. Interviews Usable for the Food-Use Analysis

Not all of the 2,386 interviews could be used to analyze the impact of cash-out on household food use. Nineteen interviews (11 with check recipients and 8 with coupon recipients) were conducted with "nonhousekeeping households," that is, households that contained no member who consumed ten or more meals at home during the seven-day reference period. In addition, the data for 78 households (35 check recipients and 43 coupon recipients) were deemed to be of insufficient quality, because the interviews had been conducted more than 48 hours after the end of the seven-day reference period, or because the food-use data were mistakenly collected for a period longer than the seven-day reference period. We excluded these 97 cases from the analysis of the impacts of cash-out on the use of food at home. These reductions resulted in a final sample of 2,289 households (1,209 check recipients and 1,080 coupon recipients) for the household food-use analysis. For analyses that did not depend on food-use data, such as respondents' attitudes toward check benefits, the larger sample was used.

F. INTERVIEW LENGTH

The main household survey instrument (as opposed to the screener instrument) had two main sections. Section I contained questions about household composition, household income, household expenditures, and opinions about the cashed-out benefits. Section I took an average of 44 minutes

to complete. Section II, which contained the detailed questions on food use and meals eaten, took an average of 89 minutes to complete. Thus, the entire interview took an average of 131 minutes to complete. Table A.4 provides frequency distributions of interview lengths for each section of the survey instrument.

TABLE A.4

ALABAMA INTERVIEW LENGTH

LENGTH OF SECTION I, IN MINUTES

Length Part 1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0-14 Minutes	4	0.2	4	0.2
15-29 Minutes	314	14.2	318	14.4
30-44 Minutes	892	40.3	1,210	54.7
45-59 Minutes	526	23.8	1,736	78.4
60-74 Minutes	308	13.9	2,044	92.4
75-90 Minutes	169	7.6	2,213	100.0

Frequency Missing = 172
Mean Length = 43.8 Minutes

LENGTH OF SECTION II, IN MINUTES

Length Part 2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
15-29 Minutes	10	0.5	10	0.5
30-44 Minutes	74	3.6	84	4.0
45-59 Minutes	210	10.1	294	14.1
60-74 Minutes	392	18.8	686	33.0
75-90 Minutes	575	27.6	1,261	60.6
90-104 Minutes	251	12.1	1,512	72.7
105-119 Minutes	234	11.2	1,746	83.9
120-149 Minutes	229	11.0	1,975	94.9
150-179 Minutes	80	3.8	2,055	98.8
3-4 Hours	26	1.2	2,081	100.0

Frequency Missing = 304
Mean Length = 88.7 Minutes

LENGTH OF TOTAL INTERVIEW, IN MINUTES

Total Length	Frequency	Percent	Cumulative Frequency	Cumulative Percent
30-44 Minutes	1	0.1	1	0.1
45-59 Minutes	12	0.6	13	0.7
60-74 Minutes	48	2.5	61	3.1
75-90 Minutes	221	11.4	282	14.5
90-104 Minutes	149	7.7	431	22.1
105-119 Minutes	297	15.3	728	37.4
120-149 Minutes	641	32.9	1,369	70.3
150-179 Minutes	364	18.7	1,733	89.1
3-4 Hours	196	10.1	1,929	99.1
4-5 Hours	17	0.9	1,946	100.0

Frequency Missing = 439
Mean Length = 131.3 Minutes

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B:

STATISTICAL POWER ANALYSIS

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The survey data provide information about the variances of the key outcome measures used in the analysis. This information can be very useful in designing similar studies in the future. In particular, it is of interest to examine the statistical power that can be attained in difference-in-means and difference-in-proportions tests for alternative sample sizes, given the observed variances.

This appendix shows the relationship between statistical power, the size of the sample, and the size of the true outcome effect being measured for three representative variables considered in the body of the report: (1) the money value of purchased food used at home, (2) the amount of food energy in the food used at home per equivalent nutrition unit, and (3) the percentage of households attaining the recommended dietary allowance (RDA) for food energy.

Table B.1 shows statistical power levels associated with a difference-of-means test comparing experimental and control averages for the value of weekly purchased food used at home. The power levels that are shown as entries in the table are the probabilities of detecting a statistically significant impact in the outcome variable when the sample size is the size shown in the row heading and the true size of the effect is the size shown in the column heading. For instance, the table shows that, if the true effect was 6 percent of the mean, then, with a sample size of 800 treatment observations and 800 control observations, we would have a 60 percent chance of obtaining an estimate of the effect that is significantly different from zero at the 95 percent confidence level. Tables B.2 and B.3 provide comparable information for, respectively, average food energy as a percentage of the RDA and the percentage of households attaining the RDA for food energy.

TABLE B.1

STATISTICAL POWER LEVELS FOR DIFFERENCE-IN-MEANS TESTS FOR THE MONEY VALUE OF PURCHASED FOOD USED AT HOME

Number of Observations in Each Group[a]	Assumed True Effect (Expressed as a Percentage of the Mean)			
	4%	6%	8%	10%
200	0.16	0.24	0.35	0.47
400	0.23	0.38	0.55	0.72
600	0.29	0.50	0.70	0.85
800	0.35	0.60	0.81	0.93
1,000	0.41	0.68	0.87	0.97
1,200	0.46	0.74	0.92	0.99

SOURCE: Table entries are power levels calculated according to the table in A-12b, in Dixon and Massey, 1965, assuming a 95 percent confidence level and a one-tailed test.

NOTE: The outcome variable is assumed to have a mean of $55 and a standard deviation of $35, based on a tabulation of the survey data.

[a]Equal treatment and control sample sizes are assumed, so that total observations for the experimental and control groups are twice the numbers shown in the row headings.

TABLE B.2

STATISTICAL POWER LEVELS FOR DIFFERENCE-IN-MEANS TESTS FOR THE AVAILABILITY OF FOOD ENERGY (EXPRESSED AS A PERCENTAGE OF THE RDA)

Number of Observations in Each Group[a]	Assumed True Effect (Expressed as a Percentage of the Mean)			
	4%	6%	8%	10%
200	0.21	0.34	0.50	0.66
400	0.31	0.54	0.75	0.89
600	0.41	0.69	0.88	0.97
800	0.50	0.79	0.95	0.99
1,000	0.57	0.86	0.98	1.00
1,200	0.64	0.91	0.99	1.00

SOURCE: Table entries are power levels according to the table in A-12b, in Dixon and Massey, 1965, assuming a 95 percent confidence level and a one-tailed test.

NOTE: The outcome variable is assumed to have a mean of 162 percent and a standard deviation of 79 percent, based on a tabulation of the survey data.

[a]Equal treatment and control sample sizes are assumed, so that total observations for the experimental and control groups are twice the numbers shown in the row headings.

RDA = recommended dietary allowance.

TABLE B.3

STATISTICAL POWER LEVELS FOR DIFFERENCE-IN-PERCENTAGES TESTS FOR AVAILABILITY OF FOOD ENERGY IN AMOUNTS THAT EQUAL OR EXCEED THE RDA

Number of Observations in Each Group[a]	Assumed True Effect (Expressed as a Percentage of the Mean)			
	4%	6%	8%	10%
200	0.20	0.33	0.48	0.64
400	0.30	0.52	0.73	0.88
600	0.40	0.67	0.86	0.96
800	0.48	0.77	0.94	0.99
1,000	0.56	0.84	0.97	1.00
1,200	0.62	0.90	0.99	1.00

SOURCE: Table entries are power levels according to the table in A-12b, in Dixon and Massey, 1965, assuming a 95 percent confidence level and a one-tailed test.

NOTE: The outcome variable is assumed to have a mean of 80 percent and a standard deviation of 40 percent, based on a tabulation of the survey data.

[a]Equal treatment and control sample sizes are assumed, so that total observations for the experimental and control groups are twice the numbers shown in the row headings.

RDA = recommended dietary allowance.

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APPENDIX C

DATA ENTRY AND DATA EDITING PROCEDURES

MPR's subcontractor, National Analysts, performed the data entry and food-related data coding, with review and technical assistance from nutritionists from the U.S. Department of Agriculture (USDA). In this appendix, we describe the procedures used to perform these tasks.

A. DATA PREPARATION FOR SECTION I AND ASSOCIATED MATERIALS

Through a sequence of 52 questions, Section I of the survey instrument for the Alabama Cash-Out Evaluation obtained information on household composition, sources and amounts of income, expenditures by major category, participation in food-assistance programs, recipients' opinions of those programs, and the like. In constructing the evaluation's main data file, this information was processed jointly with information from the screening interview (the screener). The processing entailed the key-entry and verification of data from hard-copy survey instruments, followed by item-by-item data logic and consistency checks.

- *Data Entry*

  Section I was key-entered and 100-percent verified in batches of ten document sets. A programmable entry system was used, which precluded inputting illegal values (for example, alpha and out-of-range numeric codes), at both the entry and verifying stages.

- *Data Editing*

  Keyed and verified data records were forwarded to data cleaners, who built an initial data file, cumulating the records in sequence by interview identification number. Working in batches of 100 to 300 records, the data cleaners ran the initial file through a series of logic and edit checks and obtained error printouts, by household, of the problem cases. Each problem triggered a document look-up, that is, the source document was consulted to determine whether the information in the file was correct. If the file was wrong, it was adjusted to reflect the corrected information from the questionnaire.

  All adjusted problem cases were run through the cleaning program until no errors were detected. The fully edited batch data records were then added to the final "clean" data file. Typically, each record was subjected to two interactions of cleaning processing--the initial and the adjusted run--before becoming resident on the final clean file; however, the cleaning process was repeated until all problem situations were resolved.

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B. DATA PREPARATION FOR SECTION II AND ASSOCIATED MATERIALS

Section II of the survey instrument consists of the seven-day food-use recall. Associated with these data are items used to develop the food use variables, such as information on the number and

2. Data Edits

Section II and related data were subjected to several levels of data editing and preparation. The first level was the preliminary data-file cleaning. Working with batches of approximately 20 records, the data cleaner reviewed the annotated printout of the questionnaire and an "Errors and Warnings Report" for each individual questionnaire. Data problems were identified either as warnings (in the case of unusual amounts) or errors (in the case of unallowable codes). Other problems that were flagged at this stage were the absence of a code on the nutrient file corresponding to the code on the data entry file, and weight or nutrient levels that exceeded prespecified edit checks.

To resolve problems, the data cleaner consulted the primary source document (the screener or the main survey instrument), the computer printout, and manuals provided by the USDA. Any adjustments to the record were entered directly into the file and noted on the computer printout. Food coding and weight problems that could not be resolved from the data (or by contacts in the field), were written up as technical assistance requests and were forwarded to FNS/HNIS for review.

The Section II record was run through the cleaning process iteratively until no errors remained in the "Errors and Warning Report." These data were then made resident on a cleaned data file, and were ready for final preparation (for example, mean price calculation). An overview of the cleaning activities for Section II is presented below.

a. Range Checks

We used two types of range checks. *Warnings* indicated that the response keyed in (or calculated, if the item was a derived variable) was higher or lower than the expected range of values established for the item. Development of the upper (and lower) limits was based on previous empirical findings, as well as on logically derived cut-off values. Warnings did not necessarily signify unacceptable values. Instead, they indicated unusual responses that should be reviewed critically before being accepted at face value (for example, individual food items that were purchased for more than $25.00). *Errors* indicated that the imputed or derived value was unacceptable. Although rare,

this type of error could occur when a value response was inconsistent with the contingency skip in the questionnaire.

b. Linkage Errors

Linkage errors occurred when the food item specified in the questionnaire could not be linked to the HNIS nutrient data file. Because linkage errors, unlike warnings, could not be allowed in the final output file, the data cleaners reviewed the printout in each case to determine what changes needed to be made. Typically, linkage errors occurred when interviewers used verbal descriptions, rather than existing food codes, to report food use. Linkage errors generated requests to the USDA either to determine the existing food codes into which the item was to be classified or to provide new food codes.

Linkage errors also resulted when quantity information was missing. In the rare cases in which this occurred, quantity unit estimates were generated for use with specific food items.

c. Weight-Check Warnings

For 154 of the most commonly used food items, special attention was given to ensure their correct entry into the file. Upper boundaries were set on the basis of empirical data by HNIS for the quantities used for these items. If the amount used of a food (regardless of the form in which the quantity was reported) exceeded the cut-off, reported in pounds, then the item was identified for closer inspection by the data cleaner.

The data cleaners examined the quantities used in the context of the amount consumed per equivalent nutrition unit (ENU), as well as for the household as a whole. If the food item and quantities were coded properly, then the unusually large amount was allowed to stand. If a problem was noted, the data were corrected and recycled through the cleaning program.

d. Nutrient Warnings

As with the weight-check warnings, document look-ups were triggered when a household's nutrient consumption was outside the edit-check limits set by the USDA. The program determined the quantity of key nutrients used by each household. After standardizing for household composition and the number of meals eaten at home by the household, these nutrient-availability estimates were compared with the households' recommended dietary allowances. For five key nutrients, both upper and lower cut-offs were established that, if exceeded, signaled the data cleaner to re-examine the printout for the household food-use section of the interview.

Nutrient	Low Limit	High Limit
Food Energy	0.50	3.00
Calcium	0.20	3.50
Vitamin A	0.20	3.50
Riboflavin	0.20	3.50
Ascorbic Acid	0.30	6.00

To aid the data cleaners, the computer printout provided information about the individual food items that were highest in that nutrient and, potentially, the likely source of the error.

e. Special Check Warnings

In addition to the routine edit checks, several additional special warnings were programmed for the Alabama data. First, the data were checked to ensure that the food-use period was exactly seven days, and that no interview was performed more than 48 hours after the end of the food-use reporting period. Second, any missing information about the number and location of meals in the food-use period triggered a document look-up and review. If appropriate values for the missing data could not be determined, the interview was voided.

Several additional edits examined the completeness and reasonableness of the food-use information. These include:

- Total number of food items reported--any interview schedule with less than 16 or more than 79 separate food items reported was reviewed for accuracy of input.
- Total number of food pages of the survey instrument on which food items were reported--any schedule with reported food items on fewer than six pages was reviewed for accuracy.
- Total number of gift food items reported--any schedule with more than nine food items received as a gift or in-lieu of pay was examined.
- Total number of home-produced food items reported--any schedule with more than five food items reported as home-produced was reviewed.
- Total number of WIC-purchased food items--any schedule with more than six food items acquired with WIC vouchers was examined for accuracy.
- Total number of missing prices--any schedule with more than nine missing prices for purchased foods was reviewed for acceptability.
- Money value of food used per ENU--if, after the missing prices were imputed, the money value of *all* food used was (1) $8.00 or less, or (2) $80.00 or more per ENU, the data were reviewed item-by-item.

3. Mean Price/Missing Price Imputation

The average reported prices of various kinds of food in the data set were used in two important ways in the file editing and file creation process. First, we computed the mean price for each kind of food, after which we examined "outlier" observations that were more than two standard deviations from the means. This process was very useful in identifying errors in the quantity and food-code information, which were common, as well as errors in the price data. Second, we used average prices to impute missing price information.

To determine the money value of food used, all foods used had to be assigned a unit price, regardless of whether they had been purchased. To derive a reasonable and stable imputed value for missing price data, we applied two steps: (1) extreme-value checking, and (2) imputation.

a. Step 1--Extreme-Value Checking

A program identified the mean price per pound per food item and identified those values either (1) two standard deviations above the mean, or (2) two standard deviations below *or* 10 percent below the mean. All of these values were designated as "outliers" and were reviewed individually. For many of the observations, reviews revealed no apparent error; these observations were allowed to stand. For the other observations, the incorrect entry of quantity information onto the data file was found to be the most common type of error. Such mistakes were corrected.

We then performed similar checks on a second version of the data file, using means calculated after the first round of corrections had been implemented. In this second round of checks, we checked price observations that were at least three standard deviations above or two standard deviations below the mean. We also examined food items for which the standard deviations could not be calculated because only one observation in the data set existed, but for which the prices appeared to be particularly high or particularly low.

In addition, we examined other observations if the maximum price per pound for the food item was more than ten times the lowest price. The outlier prices were reviewed and corrected, as appropriate.

Finally, we reviewed all foods for which the price per pound was greater than $3 *and* the number of observations was three or less. This criterion was meant to identify incorrect price observations that had not been caught by the criteria outlined above. Incorrect values were corrected, as appropriate.

b. Step 2--Imputation

After the editing had been implemented, we imputed missing prices. To impute prices, we followed the procedures specified in this subsection.

For most foods, we used the mean prices from observations with nonmissing price data for the relevant foods (excluding outliers) to impute the missing prices (assuming that there were

observations with nonmissing prices for the relevant foods).[1] For each food for which the number of missing values exceeded the number of observations for which data were available, the mean price, excluding outliers, was examined to determine whether the mean price was reasonable. If the mean price (without outliers) *was* reasonable, we used the mean price (without outliers) to impute the missing price. If the mean price was not reasonable, a field person checked the prices of that food item in supermarkets in the survey's geographic area that serve high proportions of low-income households. (Only a very small number of foods met this criterion.)

We followed a two-step process for foods in the data set for which there were no nonmissing price data. First, the food code in the interview was examined to identify possible coding errors. Second, if no error was identified, a local field person checked prices in supermarkets in a low-income area.

C. IMPUTING AND EDITING OF INCOME AND FOOD STAMP BENEFIT AMOUNTS

We subjected the amounts for income sources and food stamp benefits to two types of editing. First, we imputed missing income amounts by using regression procedures or simply by imputing the mean of the sample distribution. Second, we replaced the self-reported food stamp, AFDC, Social Security, and Supplemental Security Income (SSI) amounts with amounts obtained from program records.

1. Imputing Missing Income Amounts

The questionnaire contains questions about 17 different sources of income. Respondents were asked: (1) whether anyone in the household received a specific type of income, (2) if anyone did, who the recipient was, and (3) what amount was received. When the person receiving the source was not identified, the amount was not ascertained.

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[1]In some instances, in which the number of price observations for a given item was very low, that item was combined with similar items in the data set to obtain a mean price estimate. (For instance, the price observations for different types of canned vegetable baby food might be combined.)

The three types of missing information have very different prevalence rates. Information on whether a source of income was received at all (type 1), as well as the identity of the recipient (type 2), was missing in a total of one and zero cases, respectively. By contrast, information on the amount received was missing in a total of 60 cases in 46 different households. Given the relative infrequency of the first two types of missing information, we implemented no formal imputation procedure for these cases. When the first type of information was missing, we assumed that the source was not received.

Table C.1 shows how we handled missing information on amounts of income received. We used different solutions according to the income source. For cases with a large number of observations on reported amounts (namely, earnings and retirement income), we used a regression approach; for the other cases, we used a more ad hoc approach.

We examined the hard-copy instruments for each of the three cases with the highest reported incomes in the raw data. In one case, we deleted $500, which had been transferred from one household member to another as room rent. In another case, we excluded compensation for surgery and flood damage. The third case was found to be reasonable.

2. Replacement of Food Stamp, AFDC, Social Security, and SSI Amounts with Amounts from Program Records

To minimize potential problems of income misreporting, we replaced the self-reported amount for food stamp benefits, AFDC, Social Security, and SSI with the amounts obtained from the food stamp office administrative records for the interview month. To avoid treating observations differently according to their treatment or control status, this replacement was performed for both check and coupon recipients.

TABLE C.1

PREVALENCE OF MISSING INCOME AMOUNTS,
AND SOLUTIONS ADOPTED TO REPLACE THEM

Type of Income	Persons with Reported Amounts	Persons with Missing Amounts	Solution Used to Replace Missing Amounts (or Outliers)
Wage and Salary	800	29	regression imputation (see Section A.1)
Business Income	18	0	none
Social Security	1,054	18	regression imputation (see Section A.2)
Other Retirement Benefits	58	2	regression imputation (see Section A.2)
AFDC	612	1	assigned the mean (= $119)
SSI	871	5	assigned the mean (= $218)
Veteran Benefits	89	3	assigned the mean (= $230)
Estate, Interest, Dividends	13	0	none
Other Income (Insurance, Gift, Prizes)	54	0	none
UI/Worker Compensation	59	0	none
General Assistance	28	1	assigned the mean (= $104)
Housing Assistance	146	0	none
Alimony	4	0	none
Child Support	285	1	assigned the mean (= $121)
Foster Care	3	0	none
Rental Income	17	0	none
Farm Income	0	0	none

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

AFDC = Aid to Families with Dependent Children; SSI = Supplemental Security Income; UI = Unemployment Insurance.

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APPENDIX D

FOCUS GROUP DISCUSSION METHODOLOGY

The household survey described in Appendix A obtained rigorous quantitative information about the impacts of cash-out on recipient's food expenditures, food use, and nutrient availability. The survey also obtained some qualitative information on recipients' check-cashing experiences, perceptions about what is good and not good about checks and coupons, and relative preferences for checks or for coupons when budgeting household expenditures.

The focus group study was designed to provide complementary qualitative information about recipients' experiences with and attitudes toward check and coupon benefits. The focus group discussions explored several of the topics that were included in the recipient survey in greater depth, such as relative preferences for checks or coupons and experiences with and problems cashing food checks. The discussions also obtained information on several important issues that were not covered in the survey, including the costs incurred by recipients to participate in the Food Stamp Program (FSP) under each form of issuance and recipients' perceptions of the prevalence of food stamp fraud.

Focus groups entail discussions in which a small number of respondents talk about topics of special importance to an investigation. A focus group discussion is conducted as an open conversation, in which each respondent makes comments, asks questions, and reacts to other participants' comments and questions. The discussion is guided by a moderator, who ensures that all topics of interest are discussed by the group and that participants do not talk about topics unrelated to the study.[1]

This appendix describes the research design for the Alabama Food Stamp Cash-Out Demonstration focus groups. Section A describes the research sample. Section B describes the data collection procedures. Section C describes the methods used to analyze the discussions.

[1]See Krueger (1988), Morgan (1988), or Goldman and Schwartz-McDonald (1987) for a discussion of focus group techniques.

A. THE RESEARCH SAMPLE

This report draws on four focus group discussions that were conducted in late November of 1990, in Alabama. Two groups were simultaneously conducted in Fayette County on November 29, and two groups were simultaneously conducted in downtown Birmingham on November 30.

1. Selection of Participants

Focus group participants were identified, screened, and recruited from master lists of FSP participants. To be eligible for the focus groups, participants had to meet *all* of the following criteria:

- They had to be served by either the Jefferson County main food stamp office (that is, Birmingham) or the Fayette office.
- They had to be members of the initial cash-out sample.
- They had to have been active food stamp recipients at the end of March of 1990 (that is, prior to the beginning of cash issuance in May)
- They had to have received food stamps in September of 1990 and must have been active food stamp recipients at the end of September.
- The first listed member of the household had to be either white or black.

In addition, because the recruiting was conducted by telephone, the participants had to have access to a working telephone, with a listed number that was known to the food stamp office.

Recipients who passed this screen were stratified according to three binary variables--race, age, and an indicator for benefit size (whether the benefit was $100 or more)--for a total of eight cells.[2] Participants were then randomly selected from each cell, and recruited.

On a more informal basis, we recruited participants according to the amount of their food stamp benefit. The boundary for this variable was a benefit of "less than $100" and "$100 or more." We

[2]The age breakdown referred to the fact that the household either had a food stamp recipient 60 years of age or older ("elderly") or that the household did not have a food stamp recipient 60 years of age or older ("nonelderly").

computed that 76 percent of food stamp households in Jefferson County and 54 percent in Fayette County receive a monthly benefit of $100 or more.

Between 8 and 12 persons is generally accepted as an optimal size for focus group discussions. To protect ourselves against a high no-show rate, we recruited substantially more persons for the focus groups than we needed. We recruited 24 participants in Birmingham, and 20 in Fayette County.

Participants for the focus groups were recruited by telephone approximately ten days before the scheduled session. The telephone contacts were made by two field interviewers who were working on the household food-use survey and who also had extensive experience as telephone interviewers. The interviewers were given lists of program participants, which included telephone numbers, addresses, race, age, and benefit level. If any of the potential participants indicated that lack of transportation would preclude their participation, the interviewer was authorized to offer a financial incentive ($8) to a friend or neighbor to provide transportation. Alternatively, the incentive was offered to defray child care costs, if the respondent would not have been able to attend without such help. This $8 was offered in addition to a $20 cash honorarium, which was offered in appreciation of the respondent's participation in the discussion.

A few days before the sessions began, a reminder letter was mailed to each of the individuals who had been recruited. The letter reinforced each individual's verbal commitment to participate and was a tangible reminder of the details of the focus group. A reminder telephone call was made to each participant 24 to 36 hours before the scheduled session. At that time, the individual's child care or transportation arrangements were confirmed.

2. Recipients Attending the Focus Group Discussions

Of the 20 participants recruited in Fayette, 18 showed up. One moderator led a group of ten participants, most of whom were younger than age 60, and the other moderator led a group of eight older food stamp recipients, most of whom were 60 years of age or older. The groups were divided

according to age, because the needs of older participants often differ from needs of younger participants (irrespective of discussion subject matter), and older participants may become intimidated by younger participants.

The Fayette County focus group participants closely matched the county's food stamp population on several key characteristics. Seventy percent of food stamp households in Fayette County have a white head of household, and 66 percent of our participants were white. Forty percent of households in Fayette County have a food stamp recipient 60 years of age or older. In our discussion groups, 38 percent of the participants were 60 years of age or older. Fifty-four percent of food stamp households in Fayette County receive a benefit of $100 or more, and 61 percent of our participants fell into this category.

In Birmingham, we had a much higher no-show rate; only 10 of 24 recruits showed up. Two canceled the morning of the group, because of unexpected transportation difficulties. Furthermore, the participants were not nearly as representative of all food stamp households in Jefferson County as were those in Fayette County. Only 18 percent of the Jefferson County food stamp households are headed by a white food stamp recipient, whereas 40 percent of our participants were white. Similarly, only 17 percent of food stamp households have a food stamp recipient 60 years of age or older; 30 percent of our participants were in this age category. We had better representation as far as the food stamp benefit amount was concerned. Seventy-six percent of food stamp households in Jefferson County receive benefits of $100 or more, as did 75 percent of participant households.

B. DATA COLLECTION PROCEDURES

The Fayette County focus group sessions were conducted in the conference room of the Fayette Civic Center, which is a renovated elementary school. The Birmingham groups were conducted in a classroom at the Urban League. The primary consideration in selecting these facilities was the ease with which a participant could find the location. Furthermore, we believed that participants would perceive these locations to be neutral (that is, no stigma would be attached to the facility).

The meeting rooms in which the groups took place were arranged to permit audio recording of the sessions. Participants were comfortably seated around large, rectangular tables. The door was kept closed during the focus group to maintain the confidentiality of the participants. Light refreshments were available before the start of the discussion.

Each session was attended by the focus group moderator (two moderators per location), one additional member of the research team (who served as an observer), and a household food-use survey senior supervisor (who rescreened participants, organized the refreshments, monitored the recording equipment, and distributed the honoraria). The sessions lasted between one and one-half and two hours. Participants were given their cash honoraria ($20) at the conclusion of the session.

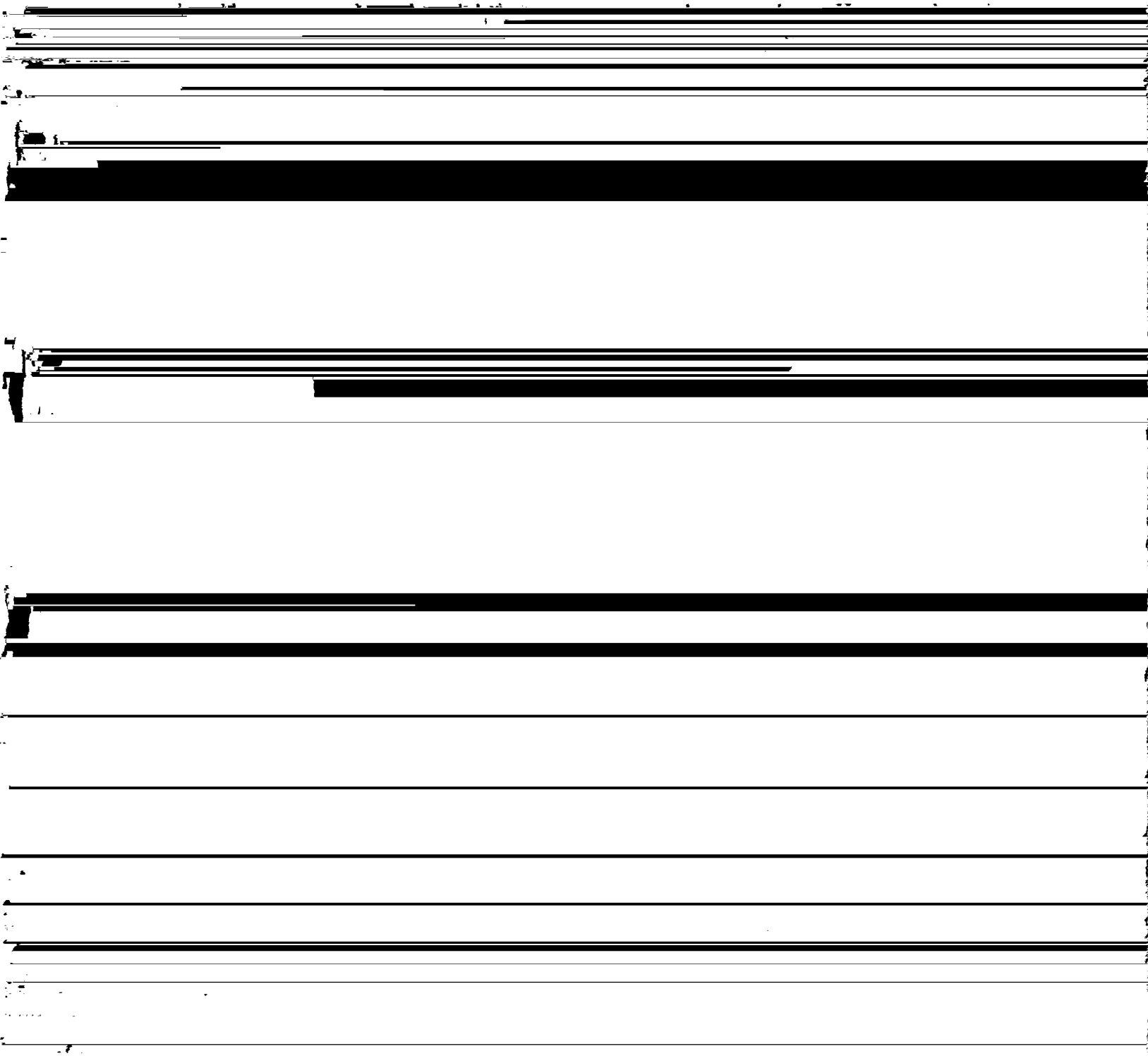
The focus group discussion sessions consisted of a series of open-ended questions about which the participants were encouraged to talk among themselves. Each moderator used the same topic guide to pose questions in the seven key areas of interest: (1) the respondents' initial reactions to the change from coupons to checks, (2) the role of checks versus coupons in household budgeting, (3) respondents' preferences for the benefit form and reasons for the preferences, (4) the check-cashing experiences and problems of recipients, (5) the costs, including stigma, of participating in the FSP under both forms of issuance, (6) recipients' knowledge of food stamp fraud, and (7) suggestions to improve the issuance of food stamp benefits.

C. THE ANALYTIC APPROACH

The commentary of the four focus groups generated nearly 100 pages of transcripts, which were analyzed by the principal author of the report of focus group findings, who was one of the moderators. The analysis was then reviewed by the second author (also a moderator) and by the director of the Alabama Food Stamp Cash-Out Demonstration, who had observed the groups, to cross-validate the analytic conclusions.

All methods of collecting data from individuals have strengths and weaknesses, and focus groups are no exception. The primary advantage of focus groups over a structured interview for gathering

the information we were seeking is the ability that focus groups afford to the analyst to probe and explore in greater depth individuals' initial responses to questions. Another, closely related, advantage over one-on-one structured interviewing is that the group interaction achieved in focus group discussions usually reduces the natural inhibitions most individuals experience when being



disadvantage of focus groups is that one cannot draw formal inferences from the data, because focus groups involve small samples that are typically not fully representative of the populations from which

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APPENDIX E

REGRESSION ESTIMATES

This appendix presents regression estimates that complement the analysis described in Chapter IV and in Appendix F. In Chapter IV, we analyzed the effect of cash-out on food use and nutrient availability by comparing the mean values of the variable representing each outcome of interest in the two samples--that is, by using simple differences in means. In the first part of this appendix, we present the regression-adjusted counterparts of these differences in means.

We estimate a regression model for each outcome, using the full sample of check and coupon households. In addition to household demographic and economic characteristics that are thought to affect the particular outcome, we include among the regressors a dummy variable representing the check or coupon status of the household. The estimated coefficient on this dummy variable is the regression-adjusted estimate of the effect of cash-out on the dependent variable.

Table E.1 compares the regression-adjusted estimates of cash-out effects with their difference-in-means counterparts. The comparison is carried out for three measures of the money value of food used at home per equivalent nutrition unit (ENU) (total food used, purchased food used, and nonpurchased food used), for two macronutrients (food energy and protein), and for seven micronutrients (vitamin A, vitamin C, vitamin B_6, folate, calcium, iron, and zinc).

Table E.2 contains the sample means and standard deviations for all of the explanatory variables used in the regressions. Note that the statistics presented in this table reflect a 7 percent sales tax offset that the State of Alabama added to the food stamp benefits of check recipients. They also reflect the division of all cash benefit and income amounts by one plus the county-specific cumulative sales tax rate. This latter adjustment facilitates the direct comparison of estimates of the effects of food stamp coupons, food stamp checks, and ordinary cash income on food consumption.

Tables E.3 through E.8 contain the full regression estimates for six different outcomes: (1) the money value of all food used at home per ENU (Table E.3), (2) the money value of purchased food used at home per ENU (Table E.4), (3) the money value of nonpurchased food used at home per ENU (Table E.5), (4) food energy as a percentage of the recommended dietary allowance (RDA)

(Table E.6), (5) protein as a percentage of the RDA (Table E.7), and (6) calcium as a percentage of the RDA (Table E.8).[1] Each regression includes a dummy variable equal to one if the household receives check benefits. The estimated coefficient of this dummy variable is the regression-adjusted estimate of the effect of cash-out presented in Table E.1.

In the second part of this appendix (Tables E.9 through E.12), we present the full regression results that support the estimates of the marginal propensities to consume (MPCs) discussed in Appendix F. (See Appendix F for a definition of the MPC concept.) We present results for two distinct dependent variables: (1) the money value of purchased food used at home, and (2) the combined money value of purchased and nonpurchased food used at home. For each dependent variable, we present two algebraically equivalent models: the first includes among the regressors the amount of the food stamp check benefit (for check recipients only, zero otherwise) and the amount of the food stamp coupon benefit (for coupon recipients only, zero otherwise). This is the specification corresponding to equation (1) in Appendix F. The second table for each dependent variable contains the results for a model that includes a food stamp benefit amount for all observations, as well as the interaction between the food stamp benefit amount and the check dummy variables. This version of the model allows the direct estimation of the difference between the MPC out of coupons and out of checks, which is presented in the fourth row of Table F.1.

[1]We present the full results for one micronutrient only, because the results for the other micronutrients are very similar. We present the regression-adjusted estimates of the effects of cash-out on all seven of the selected micronutrients in Table E.1.

TABLE E.1

COMPARISON OF DIFFERENCE-IN-MEAN AND REGRESSION-ADJUSTED ESTIMATES OF THE EFFECT OF CASH-OUT ON FOOD USE AND NUTRIENT AVAILABILITY

Outcome Measure	Regression-Adjusted Estimate	Difference-in-Mean Estimate
Money Value of Food Used at Home per ENU	0.14	-0.16
	(0.20)	(0.21)
Money Value of Purchased Food per ENU	0.07	-0.23
	(0.09)	(0.31)
Money Value of Nonpurchased Food per ENU	0.08	0.07
	(0.33)	(0.29)
Food Energy as Percentage of RDA	2.16	0.73
	(0.68)	(0.22)
Protein as Percentage of RDA	2.66	-0.81
	(0.52)	(0.15)
Vitamin A as Percentage of RDA	-1.49	-2.39
	(0.16)	(0.26)
Vitamin C as Percentage of RDA	-3.19	-4.77
	(0.41)	(0.60)
Vitamin B_6 as Percentage of RDA	1.84	0.29
	(0.56)	(0.09)
Folate as Percentage of RDA	4.09	2.25
	(0.74)	(0.39)
Calcium as Percentage of RDA	3.48	3.74
	(1.23)	(1.23)
Iron as Percentage of RDA	0.72	0.11
	(0.16)	(0.02)
Zinc as Percentage of RDA	-0.30	-1.59
	(0.11)	(0.56)

SOURCE: Evaluation of the Alabama Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests were performed on all estimates shown in this table. t-Statistics are shown in parentheses.

ENU = equivalent nutrition unit; RDA = recommended dietary allowance.

TABLE E.2

MEANS AND STANDARD DEVIATIONS OF VARIABLES USED IN THE REGRESSIONS

Variable	Mean or Proportion	Standard Deviation
Check Dummy (Check=1)	0.528	0.499
Food Stamp Benefit Amount[a]	18.189	10.056
FCU Income[b]	58.684	44.567
FCU Size in AME	2.141	1.370
Income of Non-FCU Members[b]	4.379	29.122
Sampled Person Is Black	0.683	0.465
Sampled Person Is Hispanic	0.001	0.030
Sampled Person Didn't Complete 8th Grade	0.281	0.450
Sampled Person Completed High School	0.406	0.491
Sampled Person Less Than 30 Years Old	0.243	0.429
Children Present in the FCU	0.602	0.489
Elderly Present in the FCU	0.250	0.433
Female Head Present in the FCU	0.873	0.333
Urban County	0.476	0.500

SOURCE: Evaluation of the Alabama Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

AME = adult male equivalent; FCU = food consumption unit.

[a]The check benefit amount includes an additional 7 percent payment by the State of Alabama to offset sales taxes on cash purchases of food. The adjusted check benefit amount has also been divided by 1 plus the applicable sales tax rate on cash purchases of food. The sales tax rate varies by county.

[b]The income variables have been divided by 1 plus the applicable sales tax rate on cash purchases of food.

TABLE E.3

REGRESSION ESTIMATES FOR THE MONEY VALUE OF FOOD USED AT HOME PER ENU, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	31.988	2.172	14.729
Check Dummy (Check=1)	**0.142**	**0.722**	**0.197**
Food Stamp Benefit Amount	0.359	0.050	7.114
FCU Income	0.069	0.012	5.666
FCU Size in AME	-3.617	0.387	9.339
Income of Non-FCU Members	0.031	0.013	2.471
Sampled Person Is Black	1.670	0.855	1.953
Sampled Person Is Hispanic	-2.363	12.196	0.194
Sampled Person Didn't Complete 8th Grade	-0.940	1.054	0.892
Sampled Person Completed High School	-0.334	0.881	0.379
Sampled Person Less Than 30 Years Old	-1.911	0.981	1.947
Children Present in the FCU	2.007	1.260	1.593
Elderly Present in the FCU	-0.059	1.161	0.051
Female Head Present in the FCU	-0.119	1.146	0.104
Urban County	-0.188	0.803	0.234
Number of Observations:	2289		
Mean of the Dependent Variable:	36.33		
R-squared:	0.129		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; AME = adult male equivalent; FCU = food consumption unit.

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TABLE E.4

REGRESSION ESTIMATES FOR THE MONEY VALUE OF PURCHASED FOOD PER ENU, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	28.145	2.078	13.543
Check Dummy (Check=1)	**0.065**	**0.691**	**0.094**
Food Stamp Benefit Amount	0.331	0.048	6.865
FCU Income	0.073	0.012	6.212
FCU Size in AME	-3.381	0.371	9.124
Income of Non-FCU Members	0.020	0.012	1.625
Sampled Person Is Black	2.970	0.818	3.630
Sampled Person Is Hispanic	-0.646	11.669	0.055
Sampled Person Didn't Complete 8th Grade	-1.946	1.008	1.929
Sampled Person Completed High School	-0.722	0.843	0.856
Sampled Person Less Than 30 Years Old	-3.091	0.939	3.292
Children Present in the FCU	1.418	1.206	1.176
Elderly Present in the FCU	-0.559	1.111	0.503
Female Head Present in the FCU	0.808	1.096	0.737
Urban County	0.762	0.768	0.992
Number of Observations:	2289		
Mean of the Dependent Variable:	33.54		
R-squared:	0.130		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.5

REGRESSION ESTIMATES FOR THE MONEY VALUE OF NONPURCHASED FOOD PER ENU, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	3.843	0.702	5.473
Check Dummy (Check=1)	**0.077**	**0.234**	**0.332**
Food Stamp Benefit Amount	0.028	0.016	1.688
FCU Income	-0.003	0.004	0.860
FCU Size in AME	-0.236	0.125	1.882
Income of Non-FCU Members	0.011	0.004	2.832
Sampled Person Is Black	-1.300	0.276	4.701
Sampled Person Is Hispanic	-1.717	3.944	0.435
Sampled Person Didn't Complete 8th Grade	1.006	0.341	2.952
Sampled Person Completed High School	0.387	0.285	1.359
Sampled Person Less Than 30 Years Old	1.180	0.317	3.720
Children Present in the FCU	0.589	0.408	1.445
Elderly Present in the FCU	0.501	0.375	1.333
Female Head Present in the FCU	-0.927	0.371	2.501
Urban County	-0.950	0.260	3.659
Number of Observations:	2289		
Mean of the Dependent Variable:	2.787		
R-squared:	0.044		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.6

REGRESSION ESTIMATES FOR THE DAILY AVAILABILITY OF FOOD ENERGY PER ENU AS A PERCENTAGE OF THE RDA, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	149.456	9.584	15.594
Check Dummy (Check=1)	**2.158**	**3.187**	**0.677**
Food Stamp Benefit Amount	1.169	0.222	5.258
FCU Income	0.203	0.054	3.747
FCU Size in AME	-11.500	1.709	6.728
Income of Non-FCU Members	0.092	0.055	1.666
Sampled Person Is Black	10.100	3.773	2.677
Sampled Person Is Hispanic	-17.877	53.818	0.332
Sampled Person Didn't Complete 8th Grade	-0.292	4.651	0.063
Sampled Person Completed High School	-7.340	3.889	1.887
Sampled Person Less Than 30 Years Old	-13.426	4.329	3.101
Children Present in the FCU	11.498	5.562	2.067
Elderly Present in the FCU	-3.444	5.124	0.672
Female Head Present in the FCU	3.205	5.057	0.634
Urban County	-14.967	3.543	4.224
Number of Observations:	2289		
Mean of the Dependent Variable:	161.84		
R-squared:	0.072		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; RDA = recommended dietary allowance; AME = adult male equivalent; FCU = food consumption unit.

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TABLE E.7

REGRESSION ESTIMATES FOR THE DAILY AVAILABILITY OF PROTEIN PER ENU AS A PERCENTAGE OF THE RDA, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	208.683	14.742	14.155
Check Dummy (Check=1)	**2.665**	**5.145**	**0.518**
Food Stamp Benefit Amount	2.117	0.321	6.601
FCU Income	0.184	0.084	2.184
FCU Size in AME	-21.361	3.149	6.782
Income of Non-FCU Members	0.137	0.085	1.608
Sampled Person Is Black	36.680	6.090	6.023
Sampled Person Is Hispanic	20.359	86.882	0.234
Sampled Person Didn't Complete 8th Grade	-6.744	7.507	0.898
Sampled Person Completed High School	-7.623	6.282	1.214
Sampled Person Less Than 30 Years Old	-7.323	7.202	1.017
Children Present in the FCU	37.752	8.869	4.257
Elderly Present in the FCU	-18.510	8.162	2.268
Female Head Present in the FCU	2.785	8.273	0.337
Urban County	-6.594	5.722	1.152
Number of Observations:	2289		
Mean of the Dependent Variable:	258.55		
R-squared:	0.125		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; RDA = recommended dietary allowance; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.8

REGRESSION ESTIMATES FOR THE DAILY AVAILABILITY OF CALCIUM PER ENU AS A PERCENTAGE OF THE RDA, MODEL WITH CHECK DUMMY

Variable	Coefficient	Standard Error	t-Statistic
Constant	152.339	9.076	16.784
Check Dummy (Check=1)	**3.476**	**2.832**	**1.228**
Food Stamp Benefit Amount	0.862	0.291	2.962
FCU Income	0.144	0.066	2.196
FCU Size in AME	-4.677	0.946	4.946
Income of Non-FCU Members	0.286	0.070	4.112
Sampled Person Is Black	-22.038	3.364	6.550
Sampled Person Is Hispanic	-39.459	47.830	0.825
Sampled Person Didn't Complete 8th Grade	7.364	4.133	1.782
Sampled Person Completed High School	-1.582	3.458	0.458
Sampled Person Less Than 30 Years Old	-10.990	3.724	2.951
Children Present in the FCU	-5.508	5.120	1.076
Elderly Present in the FCU	-0.291	4.595	0.063
Female Head Present in the FCU	-11.928	4.453	2.679
Urban County	-13.611	3.147	4.325
Number of Observations:	2289		
Mean of the Dependent Variable:	119.58		
R-squared:	0.147		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; RDA = recommended dietary allowance; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.9

REGRESSION ESTIMATES FOR THE MONEY VALUE OF PURCHASED FOOD PER ENU, MODEL WITH CHECK AND COUPON BENEFIT AMOUNT

Variable	Coefficient	Standard Error	t-Statistic
Constant	26.335	1.911	13.779
Check Benefit Amount	**0.311**	**0.047**	**6.559**
Coupon Benefit Amount	**0.307**	**0.048**	**6.417**
FCU Income	0.073	0.012	6.213
FCU Size in AME	-3.160	0.346	9.126
Income of Non-FCU Members	0.020	0.012	1.628
Sampled Person Is Black	2.776	0.764	3.631
Sampled Person Is Hispanic	-0.572	10.908	0.052
Sampled Person Didn't Complete 8th Grade	-1.817	0.943	1.927
Sampled Person Completed High School	-0.674	0.788	0.855
Sampled Person Less Than 30 Years Old	-2.891	0.878	3.294
Children Present in the FCU	1.328	1.127	1.178
Elderly Present in the FCU	-0.525	1.039	0.506
Female Head Present in the FCU	0.753	1.025	0.735
Urban County	0.712	0.718	0.991
Number of Observations:	2289		
Mean of the Dependent Variable:	31.35		
R-squared:	0.130		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.10

REGRESSION ESTIMATES FOR THE MONEY VALUE OF PURCHASED FOOD PER ENU, MODEL WITH INTERACTION BETWEEN CHECK DUMMY AND FSP BENEFIT AMOUNT

Variable	Coefficient	Standard Error	t-Statistic
Constant	26.335	1.911	13.779
Interaction Between Check Dummy and Food Stamp Benefit Amount	**0.004**	**0.031**	**0.143**
Food Stamp Benefit Amount	**0.307**	**0.048**	**6.417**
FCU Income	0.073	0.012	6.213
FCU Size in AME	-3.160	0.346	9.126
Income of Non-FCU Members	0.020	0.012	1.628
Sampled Person Is Black	2.776	0.764	3.631
Sampled Person Is Hispanic	-0.572	10.908	0.052
Sampled Person Didn't Complete 8th Grade	-1.817	0.943	1.927
Sampled Person Completed High School	-0.674	0.788	0.855
Sampled Person Less Than 30 Years Old	-2.891	0.878	3.294
Children Present in the FCU	1.328	1.127	1.178
Elderly Present in the FCU	-0.525	1.039	0.506
Female Head Present in the FCU	0.753	1.025	0.735
Urban County	0.712	0.718	0.991
Number of Observations:	2289		
Mean of the Dependent Variable:	31.35		
R-squared:	0.130		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; FSP = Food Stamp Program; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.11

REGRESSION ESTIMATES FOR THE MONEY VALUE OF FOOD USED AT HOME PER ENU, MODEL WITH CHECK AND COUPON BENEFIT AMOUNT

Variable	Coefficient	Standard Error	t-Statistic
Constant	29.965	1.997	15.002
Check Benefit Amount	**0.341**	**0.050**	**6.863**
Coupon Benefit Amount	**0.329**	**0.050**	**6.579**
FCU Income	0.070	0.012	5.671
FCU Size in AME	-3.381	0.362	9.343
Income of Non-FCU Members	0.031	0.013	2.478
Sampled Person Is Black	1.563	0.799	1.956
Sampled Person Is Hispanic	-2.126	11.40	0.186
Sampled Person Didn't Complete 8th Grade	-0.874	0.985	0.887
Sampled Person Completed High School	-0.311	0.823	0.378
Sampled Person Less Than 30 Years Old	-1.792	0.917	1.954
Children Present in the FCU	1.884	1.178	1.600
Elderly Present in the FCU	-0.062	1.085	0.057
Female Head Present in the FCU	-0.116	1.071	0.109
Urban County	-0.178	0.750	0.237
Number of Observations:	2289		
Mean of the Dependent Variable:	33.95		
R-squared:	0.129		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; AME = adult male equivalent; FCU = food consumption unit.

TABLE E.12

REGRESSION ESTIMATES FOR THE MONEY VALUE OF FOOD USED AT HOME PER ENU, MODEL WITH INTERACTION BETWEEN CHECK DUMMY AND FSP BENEFIT AMOUNT

Variable	Coefficient	Standard Error	t-Statistics
Constant	29.965	1.997	15.002
Interaction Between Check Dummy and Food Stamp Benefit Amount	**0.012**	**0.032**	**0.358**
Weekly Food Stamp Benefit Amount	**0.329**	**0.050**	**6.579**
FCU Income	0.070	0.012	5.671
FCU Size in AME	-3.381	0.362	9.343
Income of Non-FCU Members	0.031	0.013	2.478
Sampled Person Is Black	1.563	0.799	1.956
Sampled Person Is Hispanic	-2.126	11.400	0.186
Sampled Person Didn't Complete 8th Grade	-0.874	0.985	0.887
Sampled Person Completed High School	-0.311	0.823	0.378
Sampled Person Less Than 30 Years Old	-1.792	0.917	1.954
Children Present in the FCU	1.884	1.178	1.600
Elderly Present in the FCU	-0.062	1.085	0.057
Female Head Present in the FCU	-0.116	1.071	0.109
Urban County	-0.178	0.750	0.237
Number of Observations:	2289		
Mean of the Dependent Variable:	33.95		
R-squared:	0.129		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: All income and benefit amounts are measured in dollars per AME per week.

ENU = equivalent nutrition unit; FSP = Food Stamp Program; AME = adult male equivalent; FCU = food consumption unit.

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APPENDIX F

AN ECONOMETRIC ANALYSIS OF THE MONEY VALUE OF FOOD USED AT HOME

This appendix presents results from our estimation of an econometric model of the money value of food used at home by food stamp households. We consider two alternative measures of food use: (1) the money value of *purchased* food used at home, and (2) the money value of *all* food used at home. The second measure includes nonpurchased food, such as home-produced food and food obtained by redeeming a WIC voucher. In the model, household income, the form and amount of the food stamp benefit, and demographic variables explain the variation in food use among food stamp households. By using multivariate regression analysis to estimate the model with data for the sample of food stamp check and coupon recipients in Alabama, we obtain estimates of the effects of food stamp coupons, food stamp checks, and cash income on food use. Because the design of this study is experimental, these estimates are not essential to the evaluation of the effects of cash-out on food use. Nevertheless, they are quite useful for comparing the findings from this study with findings from the many studies of the effects of food stamps on household food use that have been based on nonexperimental data.

In this appendix, we first describe findings from previous studies. We then present and discuss the findings that are based on data from the household survey (including a discussion of the specification of the econometric model). Finally, we discuss the relationship between the econometric estimates and the findings from Chapter IV, which are based on difference-in-means estimates.

A. FINDINGS FROM PREVIOUS STUDIES

Only two studies have given researchers the opportunity to analyze directly the relative effects of food stamp checks and coupons on food-consumption behavior. These studies are the evaluation of the Puerto Rico Nutrition Assistance Program (Beebout et al., 1985; Devaney and Fraker, 1986) and the evaluation of the SSI/Elderly Food Stamp Cash-Out Demonstration (Blanchard et al., 1982; Butler, Ohls, and Posner, 1985). Neither study had an experimental design that entailed the random assignment of individual food stamp households to treatment (check) or control (coupon) status; instead, the researchers used econometric models to control for differences between check and

coupon recipients and to estimate the relative effects of checks and coupons on food-consumption behavior. The principal findings in the studies, that cash-out had no statistically significant effects on food expenditures or on the money value of food used by food stamp households, were based on comparisons of those econometric estimates.

Researchers in all of the other studies of the effects of food stamps on food consumption lacked data on actual recipients of food stamp checks.[1] Consequently, the researchers first used econometric models to estimate the effects of coupons and ordinary cash income on food consumption. They then inferred the potential effect of cash-out from the difference between the two estimates. However, the inference was based on the tenuous assumption that food stamp checks and ordinary cash income would have the same effect on food consumption.

The nonexperimental studies of the effects of food stamps and ordinary cash income on food consumption used various measures of household food consumption and household income. For example, Johnson, Burt, and Morgan (1981) and Basiotis et al. (1987) defined food consumption as the money value of all food (including nonpurchased food) used by a household from its home food supply. They defined income to include the imputed value of the nonpurchased food that was used by a household. Smallwood and Blaylock (1985) defined food consumption as the money value of purchased food used by a household from its home food supply. Consistent with this definition of food consumption, they omitted the value of nonpurchased food from their measure of income. Senauer and Young (1986) defined their measure of household food consumption on the basis of food expenditures, rather than food use, thus implicitly excluding nonpurchased food from their definition. They also excluded the value of nonpurchased food from their measure of income. The basic pattern of the studies cited was either to include the value of nonpurchased food in both the measure of food consumption and the measure of income, or to exclude it from both measures.

[1]Fraker (1990) reviews many of the existing studies of the effects of food stamps on food consumption. These studies include the two that were based on data on recipients of checks and coupons, as well as a much larger number of studies for which no data on check recipients were available.

Either approach can be defended as a valid way of controlling for the presence of nonpurchased foods, thereby permitting the researchers to estimate the effect of food stamps on the money value of food used that was purchased or on expenditures for purchased food.

Virtually all of the studies have produced estimates of the effects of an additional dollar of food stamp coupons and of ordinary cash income on food consumption. These effects are frequently referred to as the *marginal propensity to consume food* (MPC) out of coupons and out of income. In his review of 17 nonexperimental studies, several of which produced multiple estimates of the MPC out of coupons and out of cash income, Fraker (1990) reported that most estimates of the MPC out of income are in the range .05 to .10, indicating that an additional dollar of income would prompt an average food stamp household to increase its consumption of food by an amount ranging from five cents to ten cents. Fraker also reported that most estimates of the MPC out of coupons are in the range .17 to .47. In each of the reviewed studies, the estimated marginal effect of coupons exceeds that of income, and, with only a few exceptions, the ratio of the estimate of the MPC out of coupons to the estimate of the MPC out of income is between 2 and 10. Thus, the consensus finding of these studies is that the marginal effect of food stamp coupons on food consumption is much stronger than that of ordinary cash income.[2]

If one were willing to assume that food stamp checks would have the same effect on food [redacted]

effectiveness of a marginal dollar of food stamp benefits would be reduced as a consequence of cash-out by a factor of between 2-to-1 and 10-to-1.

B. FINDINGS FROM THIS STUDY

In this section, we first describe the linear model that we used to obtain regression estimates of the marginal effects of coupons, checks, and ordinary cash income on the money value of food used from home. We then discuss the regression estimates and the results of statistical tests of the differences among those estimates.

1. Model Specification

We based our estimates of the marginal effects of coupons, checks, and income on food used at home on a linear model that incorporates what we consider the principal desirable elements of the existing models reviewed by Fraker (1990). The model is as follows:

$$(1) \quad MV_i = X_i \beta + \alpha_1 CHKBEN_i + \alpha_2 COUPBEN_i + \alpha_3 INC_i + \alpha_4 AME_i + \epsilon_i,$$

where:

- i = index for households (i = 1,...,2,289)[3]
- MV = the money value of *purchased* food used at home (Version 1), or money value of *the sum of purchased and nonpurchased* food used at home (Version 2), equivalent nutrition unit (ENU)
- INC = ordinary cash income (exclusive of food stamp checks) per adult male equivalent (AME)[4]

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[3]In this model, the term "household" refers to the food consumption unit (FCU), unless explicitly stated otherwise. The FCU consists of those individuals in the dwelling unit who are either covered by the sampled person's food stamp benefit or who share food and cooking facilities with the sampled person. Guests are included in the FCU in proportion to the number of meals that they eat from the household's food supply.

[4]In this model, ENU and AME are computed on the basis of the needs of household members and guests for food energy, as indicated by the 1989 recommended dietary allowances (National Research Council, 1989). See Chapter III, Section C.1, for additional discussion of these measures.

$COUPBEN$ = the food stamp coupon benefit amount per AME; zero for check recipient

$CHKBEN$ = the food stamp check benefit amount per AME; zero for coupon recipient

AME = household size in AMEs

X = a vector of control variables (primarily demographic variables) that are described in the next paragraph

ϵ = a random disturbance term

β = a vector of parameters to be estimated

α_1 = the MPC out of food stamp checks; a parameter to be estimated

α_2 = the MPC out of food stamp coupons; a parameter to be estimated

α_3 = the MPC out of ordinary income; a parameter to be estimated

α_4 = an economies-of-scale parameter to be estimated.

The X vector includes dummy variables that indicate the age, education, and race/ethnicity of the person in whose name the household receives its food stamp benefit, as well as other dummy variables that indicate the presence in the household of children, of persons aged 60 years or older, and of a female head.[5,6] The other variables in the X vector are an intercept term, a dummy variable that indicates whether the household resides in an urban county, and the income of persons in the dwelling unit who are not members of the FCU. The latter variable is measured on a per-AME basis.[7]

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[5]The model includes the first two of the following three mutually exclusive indicators of race and ethnicity: (1) Hispanic, (2) black (not Hispanic), and (3) white (not Hispanic) or other (not Hispanic).

[6]The female-head variable is a dummy variable that equals one if there is either a female head and no male head, or a female head and a male head. It equals zero if there is a male head only.

[7]We considered several variants of equation (1) during preliminary analysis of the data. These did not yield results that differed substantively from those obtained using exactly the model specified in equation (1). One of the variants expanded equation (1) to include a binary variable designating whether a household received its food stamp benefit in the form of a check or coupons. The coefficient on this variable was small and not statistically significant. The inclusion of this variable in the model did not alter the results of any of the tests of hypotheses that are described later in this appendix.

The dependent variable in the equation (1) model is scaled by a measure of household size in ENUs because that is the best available measure of food use relative to the needs of the household members and guests who are dependent on the household food supply. In principle, we would also like to use the ENU measure of household size on the right-hand side of the model. However, we do not do so, because we are concerned that the proportion of meals eaten by household members away from home, which is reflected in ENU, is endogenous to the model. That is, we are concerned that the proportion of meals eaten away from home and, hence, the ENU, may be a function of the household's income level and the form and amount of the food stamp benefit. Such endogeneity could result in biased estimates of the coefficients α_1 through α_4 in equation (1). To avoid such bias, we use the exogenous AME measure of household size on the right-hand side of the model. The AME measure adjusts household size for the age and gender composition of the FCU, but does not adjust for the proportion of meals that are eaten away from home or for meals served to guests.

Alabama imposes state, county, and municipal sales taxes on food purchased for home use. The state sales tax rate is 4 percent. The combined county and municipal tax rate varies; it is 3 percent for 7 of the 12 counties that participated in the pure cash-out demonstration and is 4 percent for the other 5 demonstration counties. Thus, the participants in our household survey faced a cumulative sales tax of 7 percent or 8 percent on their cash purchases of food. Federal law prohibits the charging of sales taxes on food purchases made with food stamp coupons. To offset the sales tax on cash purchases of food, Alabama's Department of Human Resources added 7 percent to the food stamp benefit amounts that were issued to recipients of food stamp checks.

Because cash purchases of food are subject to sales taxes, whereas those made with food stamp coupons are not, we would expect the impact of cash income, including food stamp checks, on the money value of food used at home to be smaller than that of food stamp coupons.[8] Thus, the

[8]Because the money value of food used at home is computed on the basis of the quantities of the various types of food used and of the prices paid for those foods, it is a tax-free measure. On the other hand, a measure of expenditures for food might include sales taxes.

existence of the sales taxes could introduce spurious differences between estimates of the marginal effect of food stamp coupons on the money value of food used at home and estimates of the marginal effects of food stamp checks and ordinary cash income. To eliminate those spurious differences, we divided the check benefit amounts and all cash income amounts received by the households that participated in the Alabama cash-out survey by 1 plus the combined state, county, and local sales tax rate (that is, by 1.07 or 1.08). This division allows us to produce estimates of the marginal effects of food stamp checks and ordinary cash income on the money value of food used at home that are not distorted by the sales tax and, hence, that are fully comparable with our estimates of the marginal effects of food stamp coupons. The mean values and standard deviations of the explanatory variables used in the regression analysis, as given in Table E.2, reflect this adjustment for sales taxes.

As we indicated in the definition of the dependent variable, *MV*, we estimated two versions of this model. Version 1 explains the variation among households in their use of *purchased food* used at home, whereas Version 2 explains the variation in *the sum of purchased and nonpurchased food* used at home. The estimates of the marginal effects of income and food stamp benefits on the use of purchased food obtained on the basis of the Version 1 model may be compared appropriately with most existing estimates of the MPC out of income and out of food stamp benefits. On the other hand, the estimates obtained on the basis of the Version 2 model may be more appropriate for evaluating the effects of cash-out on the quality of the diets of recipient households. The latter model captures any negative effects that cash-out might have on the use of purchased food, as well as any potentially offsetting positive effects of cash-out on the use of nonpurchased food.

2. Estimates of the Model

We first examine estimates of the model in equation (1) when the dependent variable is the use of purchased food used at home. We then examine estimates when the dependent variable is the sum of purchased and nonpurchased food used at home. We devote more attention to the former

estimates, because they are more comparable to existing estimates of the effects of food stamp benefits and ordinary income on food consumption.

a. Results for Purchased Food

We present our estimates of the marginal propensity to consume purchased food (MPC_p) from the household food supply out of coupons, checks, and ordinary cash income in the first three rows of the first column of Table F.1. Those estimates are based exactly on the model described in equation (1). We present our estimates of the differences in the MPC_p out of coupons, checks, and income in the last three rows of the first column. The estimates are based on algebraically equivalent variants of the equation (1) model.[9]

We estimate that the MPC_p out of food stamp coupons is 0.307. The large t-statistic associated with this estimate (6.42) indicates that we can be highly confident that the true value of the MPC_p out of coupons is greater than zero.[10] The estimate is in the middle of the range of existing estimates of this relationship, as reviewed by Fraker (1990). It tells us that, for each additional dollar of food stamp benefits in the form of coupons, the use of purchased food is expected to increase by 31 cents. Our estimate of the MPC_p out of food stamp checks is 0.311, which is almost identical to our estimate of the MPC_p out of food stamp coupons. The t-statistic associated with this estimate is also large, giving us a high degree of confidence that the true MPC_p out of food stamp checks is also positive.

Our estimates indicate that ordinary cash income also increases the use of purchased food. We estimate that an additional dollar of income causes a food stamp household to increase its use of

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[9]We estimated three algebraically equivalent variants of equation (1). In the first of these, we retained *INC* and *CHKBEN*, dropped *COUPBEN*, and added *COUPBEN* + *CHKBEN*. The coefficient on *CHKBEN* is the coupon-check difference in the MPC_p. In the second variant, we retained *COUPBEN* and *CHKBEN*, dropped *INC*, and added *INC* + *COUPBEN*. The coefficient on *COUPBEN* is the coupon-income difference in the MPC_p. In the third variant, we retained *COUPBEN* and *CHKBEN*, dropped *INC*, and added *INC* + *CHKBEN*. The coefficient on *CHKBEN* is the check-income difference in the MPC_p.

[10]We also can be highly confident that the true value of the MPC_p is less than one.

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TABLE F.1

ESTIMATES OF THE EFFECTS OF COUPONS, CHECKS, AND INCOME ON THE MONEY VALUE OF FOOD USED AT HOME, BASED ON A LINEAR MODEL

	Estimated Marginal Effects on the Money Value of Food Used at Home	
	Purchased Food	Purchased and Nonpurchased Food
Coupons	0.307 ††	0.329 ††
	(6.42)	(6.58)
Checks	0.311 ††	0.341 ††
	(6.56)	(6.86)
Ordinary Income	0.073 ††	0.070 ††
	(6.21)	(5.67)
Difference: Coupons - Checks	-0.004	-0.012
	(0.14)	(0.36)
Difference: Coupons - Income	0.234 ††	0.259 ††
	(5.29)	(5.67)
Difference: Checks - Income	0.239 ††	0.271 ††
	(5.47)	(5.95)

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey, ordinary least squares regressions.

NOTE: These estimates are based on data for 1,080 coupon households and 1,209 check households.

t-Statistics are shown in parentheses.

The regression estimates presented in this table were obtained from several algebraically equivalent variants of the linear model of household food use given in equation (1). Full regression results for equation (1) are provided in Tables E.9 - E.12.

One-tailed statistical tests were performed on all estimated effects shown in this table.

††Statistically significant at the 95 percent confidence level, one-tailed test.

purchased food at home by about seven cents. Given the large t-statistic associated with this estimate, we are highly confident that the true MPC_p out of income is positive.

On the basis of the estimates presented in Table F.1, we are able to test six different hypotheses about the marginal effects of coupons, checks, and income on the use of purchased food at home. Table F.2 presents the formal specifications and empirical outcomes of those tests. Here, we briefly recapitulate in somewhat less formal terminology the conclusions that can be drawn from the tests:

Test #1: Coupons increase the use of purchased food.

Test #2: Checks increase the use of purchased food.

Test #3: Ordinary cash income increases the use of purchased food.

Test #4: The effect of coupons on the use of purchased food is virtually the same as that of checks.

Test #5: The effect of coupons on the use of purchased food is greater than that of ordinary cash income.

Test #6: The effect of checks on the use of purchased food is greater than that of ordinary cash income.

With respect to the fundamental objective of this evaluation--to determine whether cash-out has a negative effect on food consumption--Test #4 is the most important test. The results of Test #4 tell us that, in Alabama, cash-out entails no loss in the marginal effectiveness with which food stamp benefits increase the use of purchased food at home. Indeed, our estimates of the MPC_p out of food stamp coupons and out of food stamp checks are virtually identical, indicating that the two benefit forms are equally effective in increasing the use of purchased food.

In the context of the existing research on the effects of check benefits and of coupon benefits on household food consumption, Test #6 is also of considerable interest. As noted previously, most studies on this topic necessarily have been based on data sets that provide no information on actual recipients of food stamp checks. Therefore, researchers have had to infer what the effects of checks would be on the basis of estimates of the effects of ordinary cash income on food use. With

TABLE F.2

RESULTS OF TESTS OF HYPOTHESES ON THE EFFECTS OF COUPONS, CHECKS, AND INCOME ON THE MONEY VALUE OF FOOD USED AT HOME

	Test Results for the Money Value of Food Used at Home	
	Purchased Food	Purchased and Nonpurchased Food
Test #1		
Null hypothesis: MPC coupons = 0 Alt. hypothesis: MPC coupons > 0	Reject null††	Reject null††
Test #2		
Null hypothesis: MPC checks = 0 Alt. hypothesis: MPC checks > 0	Reject null††	Reject null††
Test #3		
Null hypothesis: MPC income = 0 Alt. hypothesis: MPC income > 0	Reject null††	Reject null††
Test #4		
Null hypothesis: MPC coupons = MPC checks Alt. hypothesis: MPC coupons > MPC checks	Do not reject null	Do not reject null
Test #5		
Null hypothesis: MPC coupons = MPC income Alt. hypothesis: MPC coupons > MPC income	Reject null††	Reject null††
Test #6		
Null hypothesis: MPC checks = MPC income Alt. hypothesis: MPC checks > MPR income	Reject null††	Reject null††

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey, ordinary least squares regressions.

NOTE: Test results are based on regression estimates provided in Table F.1

MPC = marginal propensity to consume.

††Null hypothesis rejected at the 95 percent confidence level.

considerable uncertainty, the researchers have assumed that check benefits would have approximately the same effect on food use as would ordinary cash income. The results of Test #6 indicate that this assumption is incorrect for purchased food. Our estimates indicate that the MPC_p out of checks is greater than the MPC_p out of ordinary cash income.

b. Results for the Sum of Purchased and Nonpurchased Food

The money value of all food used at home (purchased food plus nonpurchased food) per ENU is a better indicator of a household's nutritional well-being than is the more restricted measure based on purchased food only. In this section, we examine our estimates of the marginal effect of coupons, checks, and income on this broader measure of food use. The results are quite similar to those just discussed.

As shown in Table F.1, the regression estimates of the marginal propensity to consume the sum of purchased and nonpurchased food (MPC_{p+np}) out of coupons and checks, respectively, are .329 and .341. These estimates are slightly larger than the corresponding estimates of the MPC_p and are different from zero at very high levels of statistical significance. The small check-coupon difference in estimates of the MPC_{p+np} is not statistically significant, indicating that coupon and check benefits are equally effective in increasing the use of purchased and nonpurchased food. The estimated MPC_{p+np} out of ordinary income, .070, is significantly larger than zero but is significantly smaller than the estimates of the MPC_{p+np} out of food stamp coupons and checks. Table F.2 shows that the results of all six tests of hypotheses regarding the MPC out of coupons, checks, and ordinary income are qualitatively the same when based on the broader measure of food use as when based on the narrower measure.

C. DISCUSSION OF MPC ESTIMATES AND DIFFERENCE-IN-MEANS ESTIMATES

The difference-in-means estimates presented in Chapter IV showed that food stamp cash-out in Alabama had no effect on either the money value of purchased food used at home or on the money

value of the sum of purchased and nonpurchased food. The regression estimates of equation (1) that we have just reviewed are quite consistent with those findings. The regression estimates indicate that cash-out had no effect on the marginal effectiveness with which food stamp benefits increase the money value of food used at home, regardless of whether that food was purchased food only or was a combination of purchased and nonpurchased food. The high degree of consistency between the difference-in-means estimates and the regression estimates of the effects of cash-out strongly indicate that the issuance of food stamp benefits in the form of checks had no effect on the use of food at home by food stamp households in Alabama.

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APPENDIX G

EFFECTS OF CASH-OUT ON HOUSEHOLDS IN DIFFERENT RANGES OF THE DISTRIBUTIONS OF THE OUTCOME VARIABLES

This appendix presents supplemental information on the effects of cash-out in Alabama on key outcome measures derived from the detailed food-use data that were collected by the household survey. This information can be used to determine whether the effects of cash-out were uniformly distributed across all households, or whether they were disproportionately concentrated among households in certain ranges of the distributions of the outcome measures.

Tables G.1 through G.3 present the median values of the money value of food used at home, the availability of food energy and protein, and the availability of seven micronutrients. The values shown in these tables are the median value counterparts to the mean values in Tables IV.1, IV.6, and IV.7. Tables G.1 through G.3 can be used to determine whether the generally negligible check-coupon differences in the mean values that are described in Chapter IV mask larger negative effects of cash-out that were disproportionately concentrated among households in the lower halves of the distributions of these variables.

The tables provide no evidence that cash-out in Alabama had disproportionately large negative effects on households in the lower halves of the distributions of the various food-use outcome measures. Indeed, the median values of most of those measures are 1 to 4 percent larger for check recipients than for coupon recipients. Although we have not conducted formal statistical tests on the differences in median values, they are sufficiently small that they are unlikely to be significant.

Figure G.1 presents cumulative distributions of the money value of food used at home per equivalent nutrition unit (ENU) for check households and for coupon households. Figures G.2 through G.4 present, respectively, cumulative distributions per ENU, for check households and for coupon households, of the availability of food energy, of calcium, and of iron as percentages of the recommended dietary allowances.[1] The figures show that the effects of cash-out were generally quite

[1]We chose to analyze the effects of cash-out on the cumulative distributions of iron and calcium because these were the only micronutrients among the seven considered in this evaluation that the Expert Panel on Nutrition Monitoring has identified as presenting current public health issues (Life Sciences Research Office, 1989, page 46).

small throughout the entire range of values of the selected measures of food use and nutrient availability.

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TABLE G.1

MONEY VALUE OF FOOD USED AT HOME
(In Dollars)

Measure of Weekly Food Use	Median Value		Difference in Medians	
	Check	Coupon	Absolute	Percentage
Money Value of Food Used at Home				
Purchased food	48.55	48.03	0.52	1.09
Nonpurchased food	0.62	0.75	-0.13	-17.33
All food used at home	53.54	51.98	1.56	3.01
Money Value of Food Used at Home per ENU				
Purchased food	30.07	29.55	0.52	1.79
Nonpurchased food	0.38	0.44	-0.06	-14.40
All food used at home	33.15	32.45	0.70	2.16
Money Value of Food Used at Home per AME				
Purchased food	26.20	25.40	0.80	3.13
Nonpurchased food	0.35	0.38	-0.03	-6.89
All food used at home	28.54	27.81	0.73	2.63
Sample Size	1,209	1,080		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

ENU = equivalent nutrition unit; AME = adult male equivalent.

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TABLE G.2

AVAILABILITY OF FOOD ENERGY AND PROTEIN

Nutrient	Median Value		Difference in Medians	
	Check	Coupon	Absolute	Percentage
Food Energy (percent of RDA)	147.25	144.23	3.02	2.09
Protein (percent of RDA)	231.01	232.71	-1.70	-0.73
Percent of Food Energy from:				
Protein	13.73	13.81	-0.08	-0.51
Fat	42.47	42.89	-0.42	-0.97
Carbohydrate	43.43	42.87	0.56	1.29
Sample Size	1,209	1,080		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit, which is defined as the number of equivalent males eating all of their weekly meals from the household food supply.

RDA = recommended dietary allowance.

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TABLE G.3

NUTRIENT AVAILABILITY PER ENU
(Percentage of RDA)

	Median Value		Difference in Medians	
	Check	Coupon	Absolute	Percentage
Vitamin A	161.78	159.95	1.83	1.14
Vitamin C	209.47	210.72	-1.25	-0.60
Vitamin B_6	142.55	138.07	4.48	3.24
Folate	198.34	189.42	8.92	4.71
Calcium	104.92	100.48	4.44	4.42
Iron	161.35	155.27	6.08	3.91
Zinc	113.82	114.23	-0.41	-0.36
Sample Size	1,209	1,080		

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent males eating all of their weekly meals from the household food supply.

RDA = recommended dietary allowance.

FIGURE G.1
CUMULATIVE DISTRIBUTION: MONEY VALUE OF FOOD USED AT HOME

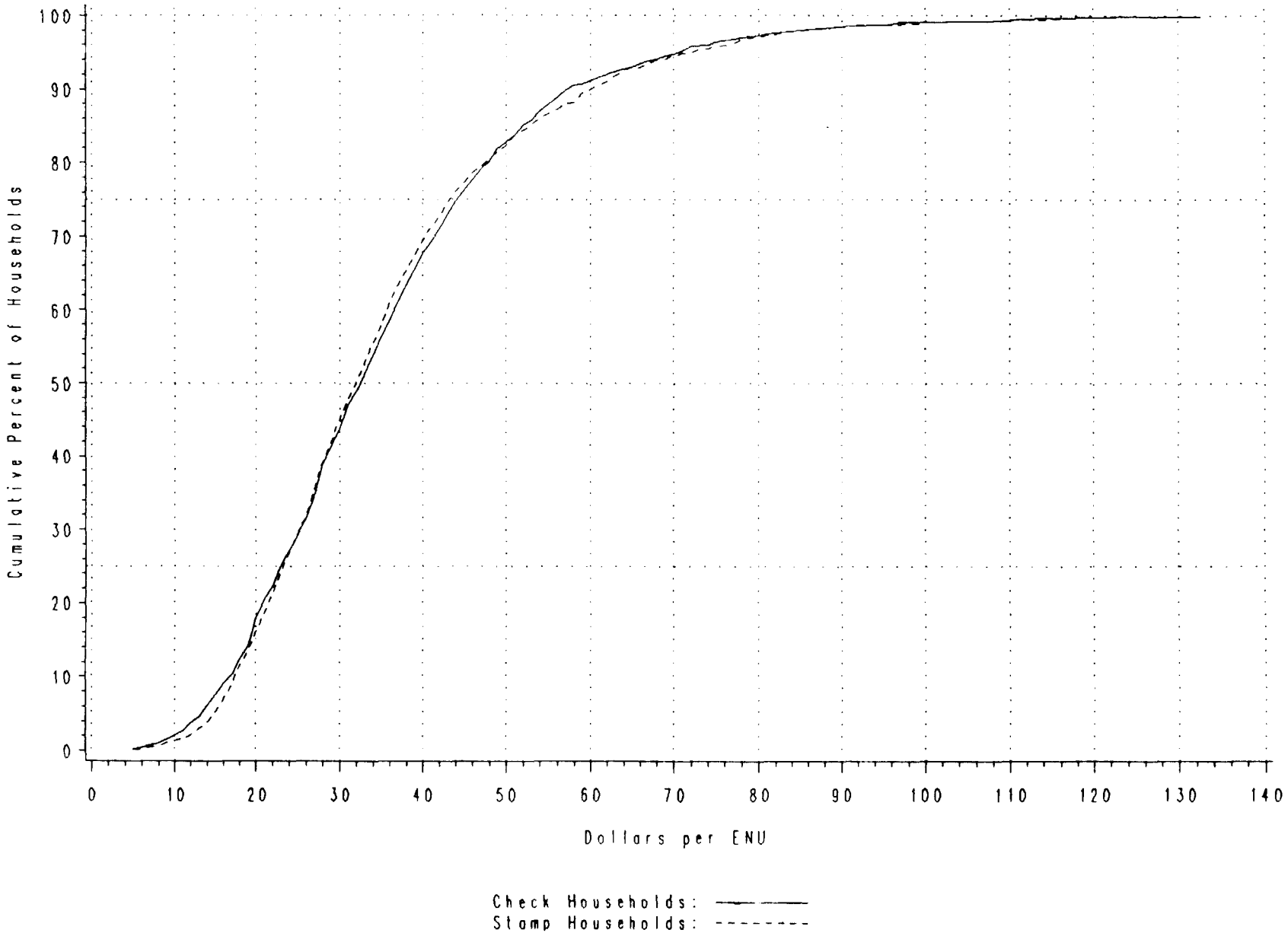

FIGURE G.2
CUMULATIVE DISTRIBUTION: FOOD ENERGY

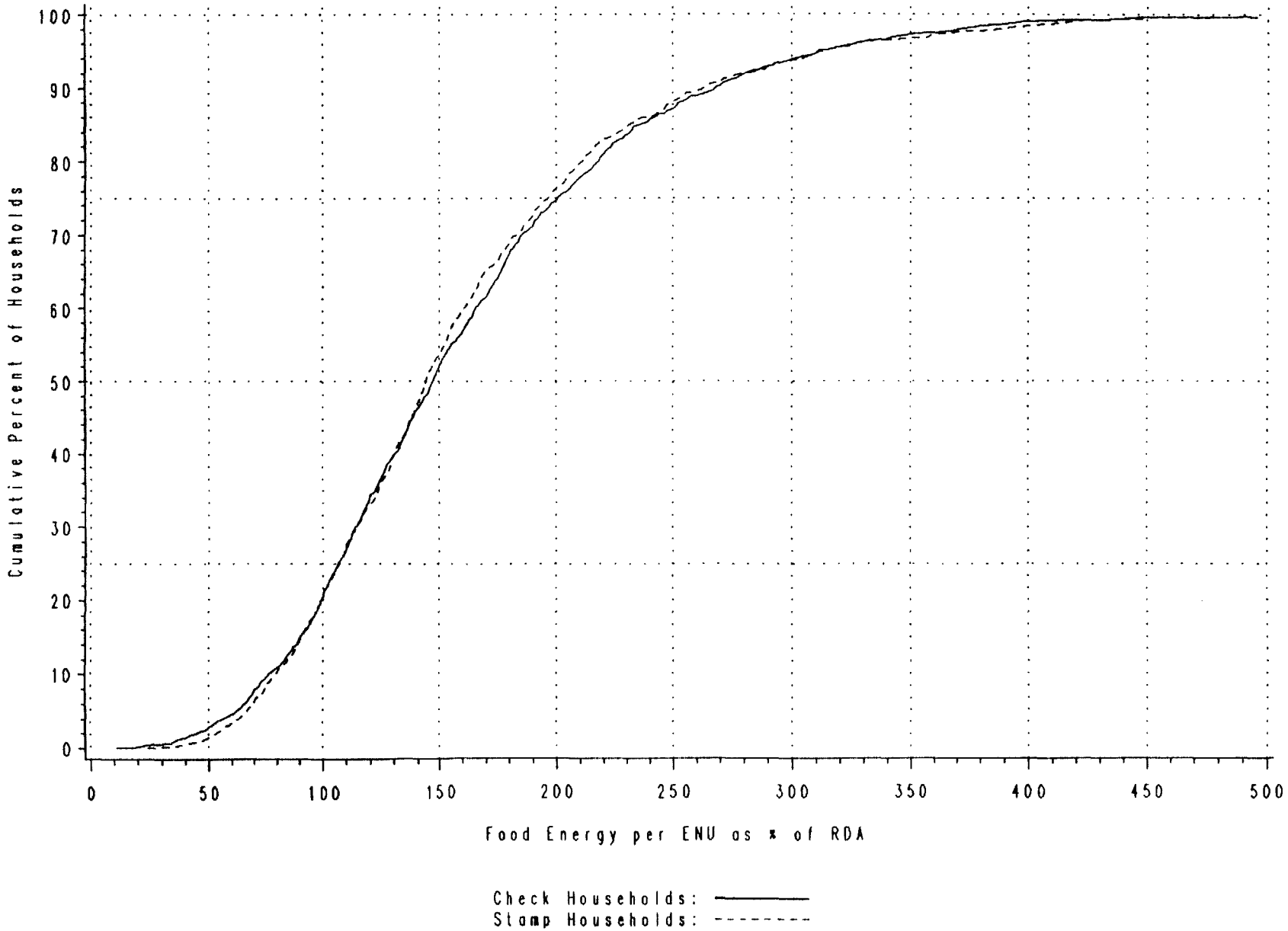

FIGURE G.3
CUMULATIVE DISTRIBUTION: CALCIUM

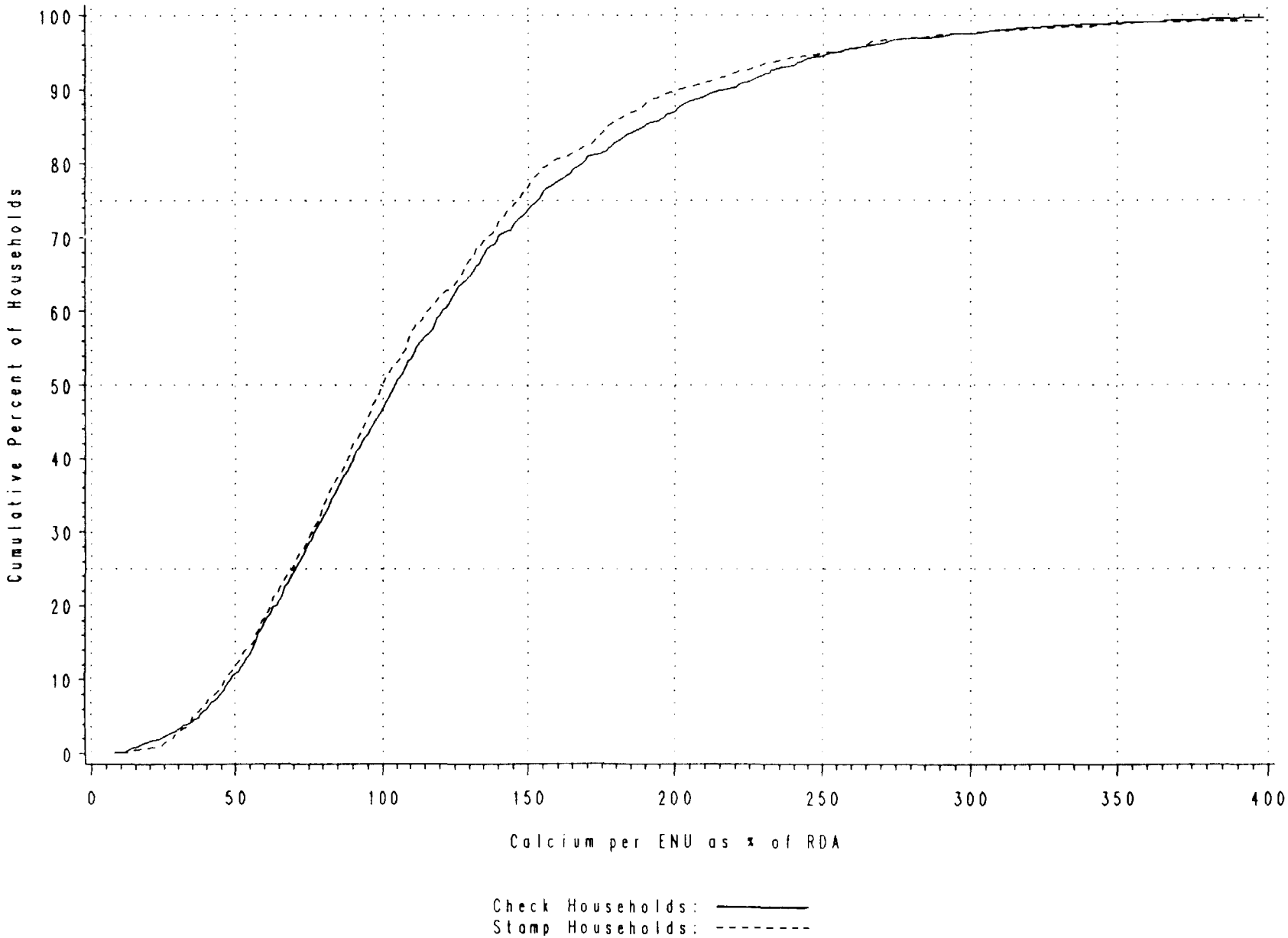

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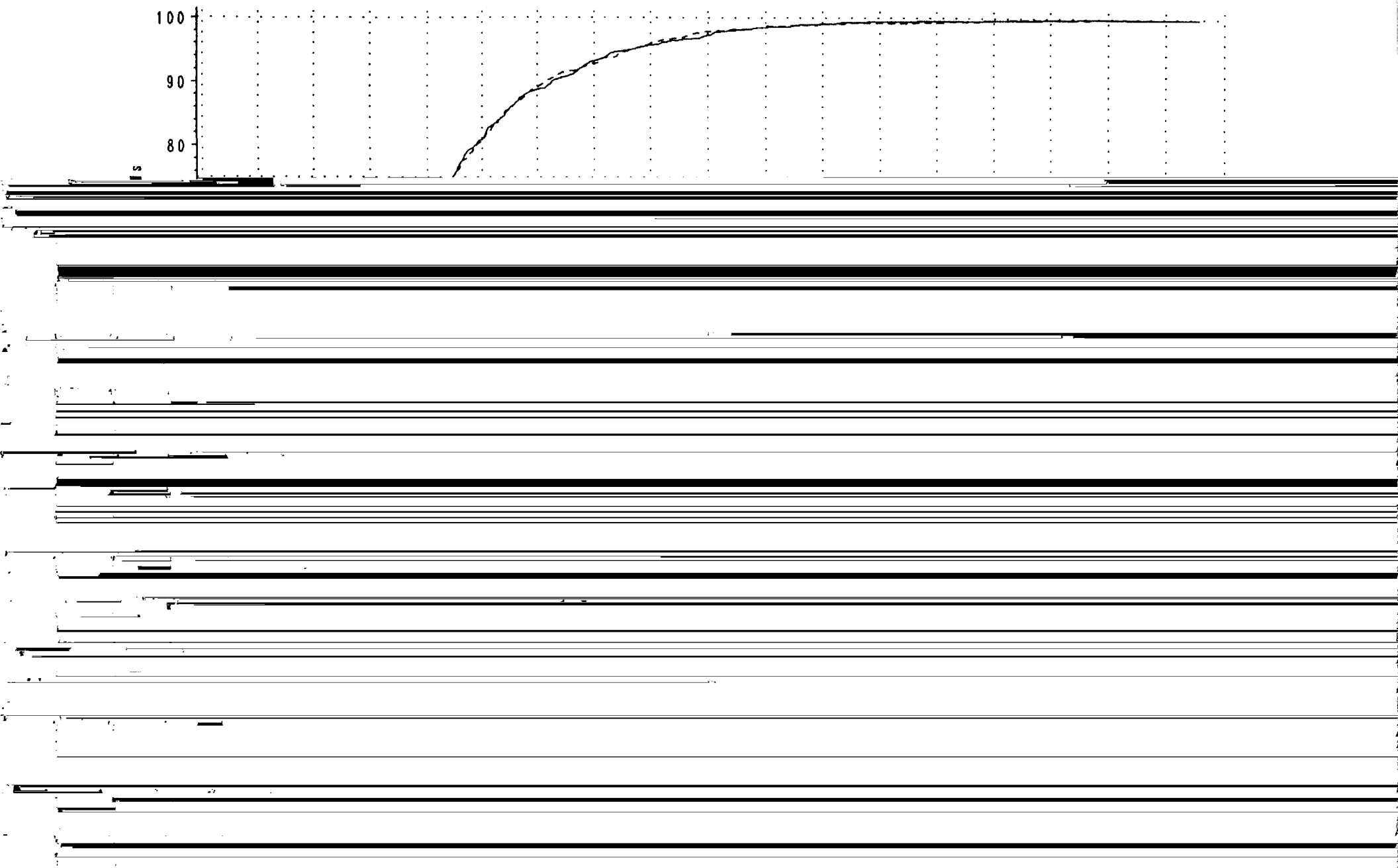
FIGURE G.4
CUMULATIVE DISTRIBUTION: IRON



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APPENDIX H

EFFECTS OF CASH-OUT ON FOOD AND NONFOOD EXPENDITURES, BASED ON DATA FROM THE SCREENER AND THE HOUSEHOLD SURVEY

As noted in the body of the report, two different measures of household expenditures for food used at home are available in the survey data set. One measure is based on information from the very detailed food-use section of the main questionnaire, in which we used detailed probes to obtain information on all food items used by the household in the seven days preceding the survey. We obtained the measure of monthly expenditures for food used at home based on these data by summing the prices times quantities used over all purchased food items reported by the household and by multiplying that sum by 4.3 (the number of weeks in a month).

The screener instrument provides a completely independent measure of monthly expenditures for food used at home. In the screener, we asked households to estimate the amount of money that they had spent during the previous month in each of four types of food stores: (1) supermarkets, (2) neighborhood grocery stores, (3) convenience stores, and (4) specialty stores. We also asked the households how much of that money had been devoted to nonfood expenditures, thus enabling us to derive a monthly estimate of expenditures for food used at home.

The two sources of survey data on monthly expenditures for food used at home are not consistent with each other. We were most concerned that the average monthly expenditures for food used at home based on the data from the screener are lower than those based on the data from the main questionnaire. According to the main questionnaire, the estimated average monthly expenditure for food used at home per household is $237, whereas the estimate from the screener data is $189, approximately 20 percent lower.[1]

To assess the divergent expenditure estimates from the survey, we compared them with two alternative sources of information about food expenditures of low-income households. The two sources were: (1) detailed food-use data collected by the 1979-1980 low-income supplement to the

[1]The correlation coefficient between the two measures of expenditures is .6, implying that the two are very significantly correlated with each other, but that each has considerable independent variation. However, because the reference periods covered by the two measures are different, there is no reason to expect that these variables would be correlated fully, even if measurement error were not an issue. Thus, in our judgement, the difference in the means between the two measures is of greater concern than is the lack of a greater degree of correlation.

Nationwide Food Consumption Survey (NFCS), and (2) detailed consumer-diary data compiled as part of the 1988-1989 Consumer Expenditure Survey that was conducted by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). When making the comparisons, we used the "Food at Home" component of the Consumer Price Index (CPI) to adjust all dollar values related to food to reflect 1990 prices. We discuss the results in the following paragraphs.

As shown in Table H.1, after adjusting for price inflation, the estimate from the 1979-1980 Supplement to the NFCS of the value of food used at home by low-income households is $310 per month. The comparable estimate from the Alabama main questionnaire is $258. (No Alabama screener data are available for this measure.) Thus, the estimates obtained in the main questionnaire are not "high" relative to similar data obtained during the 1979-1980 NFCS.[2]

The BLS did not collect data on nonpurchased food. Therefore, to develop comparisons on the basis of the BLS data, it is necessary to narrow the focus to include only expenditures for food used at home.[3] These data are presented in the second line of Table H.1. The BLS expenditure estimate ($182) is lower than both the main survey and the screener estimates ($237 and $189, respectively). However, the BLS figure is closer to the screener.

Considering all of the information presented in Table H.1 together, the available evidence with regard to the relative accuracy of the main instrument data and the screener data is mixed. The

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[2]We also examined the data from the 1977-1978 NFCS and observed patterns similar to those reported in the text with regard to the 1979-1980 data. Both data sets were also examined on a "per-household-member" basis, and, again, the basic results were not substantially affected.

[3]The BLS estimate was computed on the basis of detailed expenditures estimates that were broken down by the number of persons in the household and by income group. We computed a weighted average of the detailed BLS expenditures for each of these groupings, with the weights reflecting the proportions of households in the size and income categories among households in the Alabama sample. See footnote a of Table H.1 for details on the computation of the BLS estimate. We inflated the BLS data by a factor of 1.087 to account for changes in the relevant component of the CPI between January 1989 and June 1990.

TABLE H.1

FOOD-EXPENDITURE ESTIMATES FROM ALTERNATIVE SOURCES
(In Dollars)

	1979-1980 Nationwide Food Consumption Survey[a]	1988-1989 Consumer Expenditure Survey[b]	Alabama Main Questionnaire[c]	Alabama Screener
Value of Food Used at Home per Household per Month	310	NA	257	NA
Expenditures for Food Used at Home per Month	NA	182	237	189

[a]Based on U.S. Department of Agriculture, Human Nutrition Information Service, July 1982. The estimate is from Table 2, for Food Stamp Program participants in the South. The estimate was inflated by a factor of 1.555 to account for changes in the Consumer Price Index for Food at Home between the time of the data collection and 1990. The weekly estimate in the table was multiplied by 4.3 to convert to a monthly basis.

[b]Based on U.S., BLS, 1991. The BLS estimate was computed on the basis of detailed expenditures estimates broken down by number of persons in the household, which appear in Tables 33-39 of U.S., BLS, 1991. These tables give average expenditures for food at home, by size of household by income group. A weighted average of the detailed BLS expenditures for each of these groupings was then computed, with the weights reflecting the proportions of households in the size and income categories among households in the Alabama sample. (The BLS estimates were computed by summing "food at home" plus 54 percent of "alcoholic beverages," on the basis of unpublished estimates provided to us by the BLS, that 54 percent of alcoholic beverage expenditures are for purchases consumed at home.) We also adjusted the BLS estimates downward by a factor of 6 percent to account for the fact that, as shown in Table 8 of U.S., BLS, 1991, average expenditures in the BLS data are 6 percent lower in the South than in the nation as a whole. We inflated the BLS data by a factor of 1.087 to account for changes in the relevant component of the Consumer Price Index between January, 1989 and June, 1990.

[c]Based on the average of check and coupon households.

NA = not available.

NFCS-based estimates are more consistent with the data from the main survey instrument, whereas the BLS-based estimates are more consistent with the data from the screener.[4]

To further assess the likely accuracy of the data from the main questionnaire relative to the data from the screener, we also considered the nature of the questioning sequences in the two instruments. The main questionnaire used a much more detailed questioning sequence and a shorter reference period than did the screener. In addition, in the main questionnaire, unlike the screener, respondents were asked in advance to keep records. Thus, the recall aids used to administer the main questionnaire were much more extensive than those used in the screener. Given these differences, it does not seem surprising that more expenditures would be reported in the main questionnaire data, and it appears likely that the main questionnaire data are the more accurate.

Overall, considering the comparisons of estimates based on the data sources and the nature of the survey questions, we believe that the data from the main questionnaire are likely the more accurate. Therefore, the results presented in the main body of the report are based on the data from the main questionnaire. However, to provide complete information about the research findings, we conducted a second set of analyses of the impact of cash-out on food and nonfood expenditures, based on the screener data. Chapter V presented the findings from the *monthly money value of*

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[4]In addition to obtaining diary information on food expenditures, the BLS Consumer Expenditure Survey data collection process also obtains a second measure of food expenditures, one based on summary survey questions similar to those in our screener. Similarly, the NFCS collects data by using summary questions, as well as by collecting the detailed food-use data on which their main expenditures estimates are based. However, the researchers carrying out these two data collection efforts appear to believe that data based on detailed data collection (either the diary, in the case of the BLS, or the food-use grids, in the case of the NFCS) are likely to be more accurate than data from the summary questions, because the available published estimates from both the BLS and the NFCS are based on the detailed data. Although *published* data from these other data collection efforts are not available, we have used available unpublished information to conduct some analyses of the screener-type data. The results show no clear pattern with regard to whether screener-type questions or more detailed questions lead to higher expenditure estimates. In unpublished tabulations of a sample of households from the 1979-1980 low-income supplement of the NFCS, MPR found that weekly expenditures based on the food-grid data are approximately 14 percent higher than those based on the summary questions. However, the BLS estimates based on a summary sequence of questions lead to estimates that are approximately 28 percent *higher* than those from detailed diary date. (Based on unpublished data supplied by the BLS.)

purchased food used at home, which is based on information obtained from the main questionnaire. Section A of this appendix presents the findings based on the second measure, the *monthly expenditures for food from stores*, which is based on data from the screener.

The estimates of the impacts of the demonstration on food expenditures *per household* differ between the two data sets. Contrary to expectations, the measure of expenditures for food used at home per household based on the main questionnaire shows that check households spent $2.66 more than coupon households for food used at home. On the other hand, evidence from the screener suggests that check households spent nearly $5.00 less per month for food used at home. However, in neither case is the check-coupon household difference statistically significant.

The estimates of the impacts of the demonstration on food expenditures *per adult male equivalent (AME)* do not differ substantially between the two data sets. Evidence based on data from the main questionnaire suggests that cash-out reduced monthly expenditures for food used at home per AME by only $0.34. This estimated decrease in expenditures is not statistically significant. Evidence from the screener suggests that check households spent $1.96 less per month than coupon households per AME for food used at home. This difference is also not statistically significant.

For reasons summarized in the preceding paragraphs, we believe that the data from the main instrument are probably the more accurate. However, to provide a full overview of the survey findings in the report, we include results that are based on both measures of food expenditures.

The material that follows is organized into two sections. Section A uses data from the screener and the household survey to describe the findings on the impact of cash-out on expenditures for food used at home, on total expenditures for food, and on food and nonfood expenditure shares. Section B uses data from the screener to present findings on the impact of cash-out on expenditure shares for food used at home, by type of store.

A. IMPACTS ON FOOD AND NONFOOD EXPENDITURES

This section uses data from the screener and the main instrument to discuss the impact of cash-out on expenditures for food used at home, on total expenditures for food, and on broad categories of nonfood expenditures.[5]

1. Expenditures for Food Used At Home

Data from the screener imply that check households spent about the same amount as coupon households for food used at home. Table H.2 shows that check households reported spending an average of $4.84 less per month for food used at home than did coupon households ($186.83 versus $191.67); however, this difference is not statistically significant at the 90 percent confidence level, with a one-tailed test. Controlling for household size and composition, check households reported spending $1.96 less per month for food used at home per AME than did coupon households ($96.01 versus $97.97); however, this difference is also not statistically significant, with a one-tailed test.

2. Total Expenditures for Food

Total expenditures for food, which is the sum of expenditures for food purchased from stores, as obtained from the screener, and of expenditures for food used away from home, as obtained from the main questionnaire, were also about the same for check households and coupon households.

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[5]To make valid check-coupon household comparisons for food expenditures based on data from the screener in Alabama, we must adjust food expenditures to take into account the fact that coupon households are not charged a sales tax on food expenditures made with coupons, whereas check households are charged a sales tax on food expenditures made with checks (cash). If we do not make this adjustment, the check-coupon household comparisons will be biased upward, because expenditures for food used at home will be systematically higher for check households than for coupon households. This issue did not arise in the evaluation of cash-out in San Diego, because San Diego County does not tax food expenditures.

To make the adjustment, we subtracted from each check household's total expenditures for food used at home, as reported in the screener, an amount equal to the household's food stamp benefit amount multiplied by the county-specific cumulative sales tax rate for the county in which the household resided. The adjustment assures that we can compare the check-coupon household difference in food expenditures based on the screener data with the difference based on food-expenditure data from the main questionnaire, as the latter is based on the prices of purchased food without the sales tax.

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TABLE H.2

MONTHLY EXPENDITURES FOR FOOD USED AT HOME AND FOOD USED AWAY FROM HOME

Measure of Food Expenditure	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Used at Home					
Expenditure for food used at home (per household)	$186.83	$191.67	-$4.84	-2.53	0.96
Expenditure for food used at home (per AME)	$96.01	$97.97	-$1.96	-2.00	0.90
Percent of total food expenditures for food used at home	93.65	93.55	0.10	0.10	0.16
Percent of meals eaten at home	88.42	87.26	1.16	1.33	2.00
Food Used Away from Home					
Expenditure for food used away from home (per household)	$14.13	$15.07	-$0.94	-6.24	0.63
Expenditure for food used away from home (per AME)	$7.77	$8.77	-$1.00	-12.39	0.92
Percent of total food expenditures for food used away from home	6.35	6.45	-0.10	-1.40	0.16
Percent of meals eaten away from home	11.58	12.74	-1.16	-9.11	2.00
--Paid for	2.95	3.16	-0.21	-6.60	0.75
--Free	8.62	9.57	-0.95	-9.92	1.84
Total Expenditures for Food					
Sum of the expenditures for food used at home and expenditures for food used away from home (per household)	$199.09	$205.35	-$6.26	-3.05	1.17
Sum of the expenditures for food used at home and expenditures for food used away from home (per AME)	$103.91	$106.94	-$3.03	-2.83	1.24
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower use of food at home and total expenditures for food by check recipients, and (2) greater use of food away from home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Data are from the main questionnaire and screener.

AME = adult male equivalent.

Check households reported spending $199.09 per month for food, whereas coupon households reported $205.35 (Table H.2). This difference of $6.26 per month is not statistically significant, with a one-tailed test. Adjusting for household size and composition, check households reported spending $3.03 less per month per AME for food ($103.91 versus $106.94), but the difference is not statistically significant (Table H.2).

3. Food and Nonfood Expenditure Shares

On the basis of the amount spent at stores obtained from the screener as the measure of expenditures for food used at home, both check and coupon households allocated about 39 percent of their monthly expenditures to food (Table H.3). Note that, when the measure based on the screener data is used, rather than the money value of purchased food used at home that is based on the main questionnaire, the expenditure shares for all food for check and coupon households were each about 4 percentage points smaller (39 percent versus 43 percent). This difference reflects the lower estimate of expenditures for food used at home from the screener.

In only one of the nine nonfood consumption categories is the mean expenditure share of check households significantly *larger* than that of coupon households at the 90 percent confidence level.[6] We estimate that check households allocated about 1 percentage point more of their total expenditures to utilities than did coupon households.

B. EXPENDITURE SHARES FOR FOOD, BY TYPE OF STORE

In the screener, respondents were asked to report the total amount that the household spent at each type of store (supermarkets, neighborhood grocers, convenience stores, and specialty stores) and to report the amount that was spent for nonfood items. Thus, we obtained the amount that

[6]We are counting the two components of "shelter" ("housing" and "utilities") as separate consumption categories.

TABLE H.3

EXPENDITURE SHARES, BY BROAD CONSUMPTION CATEGORY
(In Percentages)

Consumption Category	Share of Total Expenditures		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
All Food	38.28	38.94	-0.66	-1.69	0.75
Food at home	36.08	36.59	-0.51	-1.38	0.58
Food away from home	2.19	2.35	-0.16	-6.48	0.67
All Shelter	36.98	35.42	1.56	4.39	1.86 †
Housing	15.48	14.98	0.50	3.34	0.79
Utilities	21.50	20.45	1.05	5.16	1.71 †
Medical	5.15	4.85	0.30	6.20	0.70
Transportation	9.02	9.39	-0.37	-3.97	0.77
Clothing	5.71	6.00	-0.29	-4.84	0.74
Education	1.12	1.33	-0.21	-15.77	1.58
Dependent Care	0.67	0.83	-0.16	-19.37	1.10
Recreation	1.57	1.70	-0.13	-7.83	0.84
Personal Items	1.52	1.55	-0.03	-1.90	0.25
Total	100.00	100.00			
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower spending on "all food" and "food at home" and for greater spending on other consumption categories among check recipients were performed on the check-coupon differences shown in this table.

Data are from the main questionnaire and screener.

†Statistically significant at the 90 percent confidence level, one-tailed test.

households spent for food at each type of store by subtracting the amount spent for nonfood items from the total amount spent.

Table H.4 shows the effect of cash-out on food expenditure shares, by type of store. An expenditure share is the proportion of all reported expenditures for food used at home that was spent at a particular type of store. For every dollar spent for food, both check and coupon households spent roughly 88 cents at supermarkets, roughly 7 cents at neighborhood grocery stores, roughly 3 cents at specialty stores, and roughly 2 cents at convenience stores.

Expenditure for food at supermarkets as a percent of total food expenditures was 0.74 percentage points larger for check households than for coupon households; however, this difference is not statistically significant at the 90 percent confidence level, with a two-tailed test. For each of the other types of store, check and coupon households also did not differ significantly in the expenditure share for food used at home.

TABLE H.4

EXPENDITURE SHARE FOR FOOD USED AT HOME, BY TYPE OF STORE
(Percentage of Food Expenditures)

	Mean Value		Difference in Means		
Type of Store	Check	Coupon	Absolute	Percentage	t-Statistic
Supermarket	88.11	87.37	0.74	0.84	0.97
Neighborhood grocery store	6.89	7.03	-0.14	-1.99	0.22
Convenience store	1.78	1.97	-0.19	-9.67	0.74
Specialty store	3.22	3.63	-0.41	-11.02	1.05
Total	100.00	100.00			
Sample Size	1,209	1,080			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey (screener).

NOTE: Two-tailed statistical tests were performed on all check-coupon differences shown in this table.

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APPENDIX I

STANDARD ERRORS OF ESTIMATES FOR KEY OUTCOME VARIABLES

The following tables, which correspond to Tables IV.1, IV.6, IV.7, and IV.8 in the body of the report, present standard errors of our estimates for key outcome variables in the analysis.

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TABLE I.1

STANDARD ERRORS OF ESTIMATES FOR KEY OUTCOME VARIABLES IN THE ANALYSIS OF THE MONEY VALUE OF FOOD USED AT HOME

	Standard Error of Mean		
	Check	Coupon	Check-Coupon Difference
Money Value of Food Used at Home			
Purchased food	1.01	1.03	1.44
Nonpurchased food	0.27	0.29	0.40
All food used at home	1.07	1.11	1.54
Money Value of Food Used at Home per ENU			
Purchased food	0.51	0.54	0.74
Nonpurchased food	0.17	0.17	0.24
All food used at home	0.53	0.56	0.77
Money Value of Food Used at Home per AME			
Purchased food	0.45	0.49	0.67
Nonpurchased food	0.17	0.14	0.22
All food used at home	0.49	0.52	0.71
Sample Size	1,209	1,080	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: This table presents standard errors of the estimates shown in Table IV.1.

ENU = equivalent nutrition unit; AME = adult male equivalent.

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TABLE I.2

STANDARD ERRORS OF ESTIMATES FOR KEY OUTCOME VARIABLES IN THE ANALYSIS OF THE AVAILABILITY OF FOOD ENERGY AND PROTEIN

Nutrient	Standard Error of Mean		
	Check	Coupon	Check-Coupon Difference
Food Energy (percent of RDA)	2.26	2.39	3.29
Percent for Which Food Energy Equals or Exceeds RDA	1.16	1.22	1.68
Protein (percent of RDA)	3.76	3.98	5.47
Percent for Which Protein Equals or Exceeds RDA	0.62	0.60	0.86
Percent of Food Energy from:			
Protein	0.10	0.10	0.14
Fat	0.24	0.26	0.36
Carbohydrate	0.26	0.29	0.39
Sample Size	1,209	1,080	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: This table presents standard errors of the estimates shown in Table IV.6.

RDA = recommended dietary allowance.

TABLE I.3

STANDARD ERRORS OF ESTIMATES FOR KEY OUTCOME VARIABLES IN THE ANALYSIS OF NUTRIENT AVAILABILITY PER ENU

	Standard Error of Mean		
Nutrient	Check	Coupon	Check-Coupon Difference
Vitamin A	6.02	7.10	9.31
Vitamin C	5.19	6.02	7.95
Vitamin B_6	2.35	2.44	3.39
Folate	3.91	4.17	5.72
Calcium	2.11	2.20	3.05
Iron	3.12	3.73	4.86
Zinc	1.91	2.06	2.81
Sample Size	1,209	1,080	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: This table presents standard errors of the estimates shown in Table IV.7.

ENU = equivalent nutrition unit.

TABLE I.4

STANDARD ERRORS OF ESTIMATES FOR KEY OUTCOME VARIABLES IN THE ANALYSIS OF THE PERCENTAGE OF HOUSEHOLDS FOR WHICH NUTRIENT AVAILABILITY EQUALS OR EXCEEDS THE RDA

	Standard Error of Mean		
Nutrient	Check	Coupon	Check-Coupon Difference
Vitamin A	1.24	1.33	1.82
Vitamin C	1.04	1.11	1.53
Vitamin B_6	1.24	1.30	1.80
Folate	1.02	1.08	1.48
Calcium	1.43	1.52	2.09
Iron	1.10	1.21	1.64
Zinc	1.41	1.48	2.04
Sample Size	1,209	1,080	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: This table presents standard errors of the estimates shown in Table IV.8.

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APPENDIX J

KEY RESULTS BROKEN DOWN BY URBAN VERSUS RURAL STATUS

All of the analyses of household survey data that are reported in the main body of the report for the overall survey population were also performed separately for the urban and rural subsamples. In general, results for these subsamples are very similar to those for the overall sample, and, as a result, tables with the detailed disaggregated results are not included in the main part of the report. However, this appendix presents selected findings from the disaggregated analysis in Tables J.1 through J.9. Tables J.1 through J.7 are divided into two sections, with Section A presenting urban results and Section B presenting rural results.

Our separate analyses of the urban and rural subsamples produced very few statistically significant differences between check and coupon recipients, thus reinforcing the basic finding from our analysis of the full sample that the pure cash-out demonstration in Alabama had very little effect on household food use and related outcomes. Here we briefly note the three areas of significant difference between check and coupon recipients that we found in conducting the analyses of the urban and rural subsamples:

1. For urban households, but not for rural households, cash-out was accompanied by a statistically significant shift of 1.1 percentage point from fat to carbohydrate as a source of food energy (Tables J.2.A and J.2.B). This shift is almost identical in size to that found among participants in the San Diego Food Stamp Cash-Out Demonstration (Ohls et al., 1992). All of the San Diego households resided in an urban area. Table IV.6, in Volume I of this report, shows that the shift from fat to carbohydrate among check recipients in the full Alabama sample was not statistically significant and was smaller than the shift among urban households.

2. Also for urban households, but not for rural households, the share of total expenditures allocated to utilities (and, hence, to shelter) was greater for check recipients than for coupon recipients (Tables J.7.A and J.7.B). It appears that the greater spending on utilities by urban check recipients was responsible for the full-sample finding of significantly greater spending on utilities by check households (see Table V.2).

3. Rural check recipients allocated a significantly greater share of their total expenditures to dependent care than did rural coupon recipients (Table J.7.B). We observe the opposite pattern in the urban subsample (Table J.7.A).

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TABLE J.1.A

MONEY VALUE OF FOOD USED AT HOME
IN URBAN HOUSEHOLDS
(In Dollars)

Measure of Weekly Food Use	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Money Value of Food Used at Home					
Purchased food	59.53	56.77	2.76	4.87	1.26
Nonpurchased food	3.60	3.67	-0.07	-1.87	0.14
All food used at home	63.13	60.44	2.69	4.46	1.17
Money Value of Food Used at Home per ENU					
Purchased food	34.20	34.76	-0.56	-1.60	0.51
Nonpurchased food	2.03	2.20	-0.17	-7.72	0.55
All food used at home	36.23	36.95	-0.72	-1.96	0.64
Money Value of Food Used at Home per AME					
Purchased food	29.27	29.78	-0.51	-1.70	0.52
Nonpurchased food	1.82	1.92	-0.10	-5.36	0.39
All food used at home	31.09	31.70	-0.61	-1.92	0.60
Sample Size	583	506			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower money value of purchased food and all food used at home by check recipients, and (2) greater money value of nonpurchased food used at home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

ENU = equivalent nutrition unit; AME = adult male equivalent.

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TABLE J.1.B

MONEY VALUE OF FOOD USED AT HOME
IN RURAL HOUSEHOLDS
(In Dollars)

Measure of Weekly Food Use	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Money Value of Food Used at Home					
Purchased food	51.68	53.15	-1.47	-2.78	0.79
Nonpurchased food	6.00	5.60	0.40	7.21	0.65
All food used at home	57.68	58.75	-1.07	-1.82	0.52
Money Value of Food Used at Home per ENU					
Purchased food	32.72	32.70	0.02	0.05	0.02
Nonpurchased food	3.56	3.24	0.32	9.92	0.90
All food used at home	36.28	35.94	0.34	0.94	0.32
Money Value of Food Used at Home per AME					
Purchased food	29.57	29.26	0.31	1.05	0.33
Nonpurchased food	3.38	2.94	0.44	14.92	1.27
All food used at home	32.95	32.20	0.75	2.32	0.75
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower money value of purchased food and all food used at home by check recipients, and (2) greater money value of nonpurchased food used at home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

ENU = equivalent nutrition unit; AME = adult male equivalent.

TABLE J.2.A

AVAILABILITY OF FOOD ENERGY AND PROTEIN
IN URBAN HOUSEHOLDS

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Energy (percent of RDA)	154.83	155.72	-0.89	-0.58	0.19
Percent for Which Food Energy Equals or Exceeds RDA	75.64	76.68	-1.04	-1.35	0.40
Protein (percent of RDA)	267.82	270.92	-3.10	-1.14	0.37
Percent for Which Protein Equals or Exceeds RDA	94.17	95.45	-1.28	-1.35	0.96
Percent of Food Energy from:					
Protein	14.85	14.95	-0.10	-0.70	0.51
Fat	42.41	43.48	-1.07	-2.48	2.06 **
Carbohydrate	42.75	41.57	1.18	2.84	2.02 **
Sample Size	583	506			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit, which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in the first four rows of this table. Two-tailed tests were performed on the check-coupon differences in the percentages of food energy from protein, fat, and carbohydrate.

RDA = recommended dietary allowance.

**Statistically significant at the 95 percent confidence level, two-tailed test.

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TABLE J.2.B

AVAILABILITY OF FOOD ENERGY AND PROTEIN
IN RURAL HOUSEHOLDS

Nutrient	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Energy (percent of RDA)	169.05	166.52	2.53	1.52	0.56
Percent for Which Food Energy Equals or Exceeds RDA	83.39	82.58	0.81	0.98	0.37
Protein (percent of RDA)	249.19	248.47	0.72	0.29	0.10
Percent for Which Protein Equals or Exceeds RDA	96.01	96.52	-0.51	-0.53	0.46
Percent of Food Energy from:					
Protein	13.56	13.54	0.02	0.14	0.10
Fat	42.42	42.50	-0.08	-0.18	0.16
Carbohydrate	44.02	43.96	0.06	0.14	0.11
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit, which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in the first four rows of this table. Two-tailed tests were performed on the check-coupon differences in the percentages of food energy from protein, fat, and carbohydrate.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher

RDA = recommended dietary allowance.

TABLE J.3.A

NUTRIENT AVAILABILITY PER ENU IN URBAN HOUSEHOLDS
(Percentage of RDA)

	Percentage		Difference in Percentages		
Nutrient	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	245.37	236.61	8.76	3.70	0.58
Vitamin C	259.02	263.29	-4.27	-1.62	0.37
Vitamin B_6	158.54	158.37	0.17	0.11	0.03
Folate	227.26	220.87	6.39	2.89	0.71
Calcium	107.63	103.00	4.63	4.50	1.18
Iron	174.77	180.03	-5.26	-2.92	0.68
Zinc	129.29	133.74	-4.45	-3.33	1.03
Sample Size	583	506			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.

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TABLE J.3.B

NUTRIENT AVAILABILITY PER ENU IN RURAL HOUSEHOLDS
(Percentage of RDA)

	Percentage		Difference in Means		
Nutrient	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	210.51	223.63	-13.12	-5.87	1.16
Vitamin C	242.81	248.44	-5.63	-2.27	0.52
Vitamin B_6	156.71	156.35	0.36	0.22	0.08
Folate	220.85	222.40	-1.55	-0.70	0.21
Calcium	134.11	130.48	3.63	2.78	0.81
Iron	192.57	187.26	5.31	2.84	0.87
Zinc	125.42	124.57	0.85	0.68	0.23
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.

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TABLE J.4.A

NUTRIENT AVAILABILITY PER ENU IN URBAN HOUSEHOLDS
(Percentage of Households for Which Availability
Equals or Exceeds the RDA)

	Percentage		Difference in Percentages		
Nutrient	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	74.79	72.53	2.26	3.11	0.84
Vitamin C	83.70	84.58	-0.88	-1.04	0.40
Vitamin B_6	72.56	74.51	-1.95	-2.62	0.73
Folate	81.30	82.41	-1.11	-1.34	0.47
Calcium	44.43	40.91	3.52	8.60	1.17
Iron	76.16	76.48	-0.32	-0.42	0.13
Zinc	60.89	63.64	-2.75	-4.31	0.93
Sample Size	583	506			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.

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TABLE J.4.B

NUTRIENT AVAILABILITY PER ENU IN RURAL HOUSEHOLDS
(Percentage of Households for Which Availability Equals or Exceeds the RDA)

	Percentage		Difference in Percentages		
Nutrient	Check	Coupon	Absolute	Percentage	t-Statistic
Vitamin A	76.20	75.61	0.59	0.78	0.24
Vitamin C	84.98	83.62	1.36	1.63	0.65
Vitamin B_6	77.48	77.00	0.48	0.61	0.19
Folate	89.14	87.98	1.16	1.32	0.63
Calcium	62.14	59.06	3.08	5.22	1.09
Iron	87.86	83.62	4.24	5.07	2.09
Zinc	60.54	59.06	1.48	2.51	0.52
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: Nutrient availability from food used at home is given per equivalent nutrition unit (ENU), which is defined as the number of equivalent adult males eating all of their weekly meals from the household food supply.

One-tailed statistical tests for lower availability of nutrients among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

RDA = recommended dietary allowance.

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TABLE J.5.A

RECIPIENT PERCEPTIONS OF ADEQUACY OF HOUSEHOLD FOOD SUPPLY IN URBAN HOUSEHOLDS
(Percentage of Households)

Measure of Household Food Supply	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Adequacy of Food Eaten During Past Month					
Enough of types of food we want to eat	38.24	32.10	6.14	19.13	2.18
Enough, but not always types we want to eat	42.65	43.97	-1.32	-3.01	0.45
Sometimes or often not enough	19.12	23.38	-4.26	-18.22	1.76
Any Days Household Without Food or Resources During Past Month?					
Yes	25.49	29.68	-4.19	-14.13	1.59
Number of Days[a]	4.96	5.29	-0.33	-6.27	0.80
Any Household Member Skip Meals Due to Inadequate Food or Resources During Past Month?					
Yes	10.46	12.06	-1.60	-13.28	0.86
No. of days meals were skipped[b]	5.48	4.63	0.85	18.57	0.97
Sample Size	612	539			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

"Past month" is the month preceding the survey.

[a]For households reporting at least one day without food or resources to buy food during the past month.

[b]For households reporting that a household member skipped one or more meals on at least one day during the past month.

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TABLE J.5.B

RECIPIENT PERCEPTIONS OF ADEQUACY OF HOUSEHOLD FOOD SUPPLY IN RURAL HOUSEHOLDS
(Percentage of Households)

	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Adequacy of Food Eaten During Past Month					
Enough of types of food we want to eat	32.81	35.81	-3.00	-8.37	1.11
Enough, but not always types we want to eat	53.97	50.00	3.97	7.93	1.39
Sometimes or often not enough	13.06	14.19	-1.13	-7.93	0.58
Any Days Household Without Food or Resources During Past Month?					
Yes	17.11	17.74	-0.63	-3.55	0.29
Number of days[a]	5.07	5.86	-0.79	-13.88	1.53
Any Household Member Skip Meals due to Inadequate Food or Resources During Past Month?					
Yes	6.07	7.94	-1.87	-23.60	1.29
No. of days meals were skipped[b]	4.67	6.98	-2.31	-33.16	2.21
Sample Size	643	592			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower perceptions of food adequacy among check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher

"Past month" is the month preceding the survey.

[a]For households reporting at least one day without food or resources to buy food during the past month.

[b]For households reporting that a household member skipped one or more meals on at least one day during the past month.

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TABLE J.6.A

EXPENDITURES FOR FOOD USED AT HOME AND FOOD USED AWAY FROM HOME BY URBAN HOUSEHOLDS

Measure of Food Expenditure	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Used at Home					
Expenditure for food used at home (per household)	$255.98	$244.10	$11.88	4.87	1.26
Expenditure for food used at home (per AME)	$125.87	$128.05	-$2.18	-1.70	0.52
Percent of total food expenditures for food used at home	95.00	94.80	0.20	0.21	0.31
Percent of meals eaten at home	86.76	85.46	1.30	1.52	1.43
Food Used Away from Home					
Expenditure for food used away from home (per household)	$15.40	$15.45	-$0.05	-0.26	0.02
Expenditure for food used away from home (per AME)	$7.99	$8.40	-$0.41	-4.76	0.33
Percent of total food expenditures for food used away from home	5.00	5.20	-0.20	-3.86	0.31
Percent of meals eaten away from home	13.24	14.54	-1.30	-8.94	1.43
--Paid for	3.42	3.37	0.05	1.46	0.12
--Free	9.82	11.17	-1.35	-12.07	1.66
Total Expenditures for Food					
Sum of the expenditures for food used at home and expenditures for food used away from home (per household)	$272.44	$258.98	$13.46	5.20	1.34
Sum of the expenditures for food used at home and expenditures for food used away from home (per AME)	$134.84	$136.25	-$1.41	-1.03	0.31

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower use of food at home and total expenditures for food by check recipients, and (2) greater use of food away from home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Data are from the main questionnaire only.

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TABLE J.6.B

EXPENDITURES FOR FOOD USED AT HOME AND FOOD USED AWAY FROM HOME BY RURAL HOUSEHOLDS

Measure of Food Expenditure	Mean Value		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
Food Used at Home					
Expenditure for food used at home (per household)	$222.21	$228.56	-$6.35	-2.77	0.79
Expenditure for food used at home (per AME)	$127.14	$125.82	$1.32	1.05	0.33
Percent of total food expenditures for food used at home	95.52	95.03	0.49	0.51	0.82
Percent of meals eaten at home	89.97	88.85	1.12	1.26	1.54
Food Used Away from Home					
Expenditure for food used away from home (per household)	$12.94	$14.74	-$1.80	-12.21	0.85
Expenditure for food used away from home (per AME)	$7.56	$9.10	-$1.54	-16.81	0.88
Percent of total food expenditures for food used away from home	4.48	4.97	-0.49	-9.66	0.82
Percent of meals eaten away from home	10.03	11.15	-1.12	-10.04	1.54
--Paid for	2.52	2.98	-0.46	-15.41	1.27
--Free	7.51	8.17	-0.66	-8.04	1.03
Total Expenditures for Food					
Sum of the expenditures for food used at home and expenditures for food used away from home (per household)	$233.91	$242.67	-$8.76	-3.61	1.02
Sum of the expenditures for food used at home and expenditures for food used away from home (per AME)	$134.67	$135.30	-$0.63	-0.47	0.14
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for (1) lower use of food at home and total expenditures for food by check recipients, and (2) greater use of food away from home by check recipients were performed on the check-coupon differences shown in this table.

None of the differences shown in this table is statistically significant at the 90 percent confidence level or higher.

Data are from the main questionnaire only.

AME = adult male equivalent.

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TABLE J.7.A

URBAN HOUSEHOLD EXPENDITURE SHARES, BY BROAD CONSUMPTION CATEGORY
(Percentage)

	Share of Total Expenditures		Difference in Means		
Consumption Category	Check	Coupon	Absolute	Percentage	t-Statistic
All Food	43.28	43.95	-0.67	-1.50	0.66
Food at home	41.24	41.67	-0.43	-1.03	0.36
Food away from home	2.05	2.28	-0.23	-10.09	0.78
All Shelter	36.90	35.02	1.88	5.22	1.59 †
Housing	16.22	16.03	0.19	1.19	0.20
Utilities	20.67	18.98	1.69	8.90	2.01 ††
Medical	3.18	2.71	0.47	17.34	1.03
Transportation	6.70	7.01	-0.31	-4.28	0.55
Clothing	5.64	5.72	-0.08	-1.40	0.15
Education	0.99	1.28	-0.29	-21.88	1.62
Dependent Care	0.55	1.31	-0.76	-58.02	3.27
Recreation	1.21	1.40	-0.19	-13.57	0.94
Personal Items	1.53	1.61	-0.08	-4.35	0.42
Total	100.00	100.00			
Sample Size	583	506			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower expenditure shares for "all food" and "food at home" and for greater expenditure shares for other consumption categories among check recipients were performed on the check-coupon differences shown in this table.

Data are from the main questionnaire only.

†Statistically significant at the 90 percent confidence level, one-tailed test.
††Statistically significant at the 95 percent confidence level, one-tailed test.

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TABLE J.7.B

RURAL HOUSEHOLD EXPENDITURE SHARES, BY BROAD CONSUMPTION CATEGORY
(Percentage)

Consumption Category	Share of Total Expenditures		Difference in Means		
	Check	Coupon	Absolute	Percentage	t-Statistic
All Food	43.34	42.98	0.36	0.84	0.33
Food at home	41.43	40.91	0.52	1.27	0.48
Food away from home	1.91	2.07	-0.16	-7.73	0.57
All Shelter	31.27	30.85	0.42	1.33	0.42
Housing	12.25	12.28	-0.03	-0.24	0.04
Utilities	19.02	18.57	0.45	2.42	0.59
Medical	6.11	5.96	0.15	2.68	0.25
Transportation	9.75	10.00	-0.25	-2.60	0.38
Clothing	4.84	5.53	-0.69	-12.48	1.40
Education	1.05	1.26	-0.21	-15.87	1.11
Dependent Care	0.68	0.36	0.32	86.11	1.92 †
Recreation	1.71	1.78	-0.07	-4.49	0.34
Personal Items	1.25	1.28	-0.03	-2.34	0.22
Total	100.00	100.00			
Sample Size	626	574			

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

NOTE: One-tailed statistical tests for lower expenditure shares for "all food" and "food at home" and for greater expenditure shares for other consumption categories among check recipients were performed on the check-coupon differences shown in this table.

Data are from the main questionnaire only.

†Statistically significant at the 90 percent confidence level, one-tailed test.

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TABLE J.8

URBAN AND RURAL RECIPIENTS' OPINIONS ON WHAT IS GOOD AND BAD ABOUT CHECKS AND COUPONS
(Percentage of Households)

Recipients' Opinions About Checks and Coupons	Urban Households		Rural Households	
	Check	Coupon	Check	Coupon
What Is Good About Checks				
Can be used for items other than food	48.7	43.2	37.5	36.0
Do not have to go to issuance office	19.0	6.9	13.5	6.9
Have more choices of food stores	3.8	2.0	7.6	5.7
More convenient/easier to spend	4.4	2.2	6.1	2.7
Nothing	10.1	18.6	8.1	11.7
What Is Not Good About Checks				
Does not make sure benefits are spent on food	12.4	34.7	12.9	28.0
Do not budget food expenses well	7.2	2.2	4.2	2.9
Need to pay a fee to cash checks	5.1	4.6	4.8	4.4
Nothing	41.2	17.1	47.1	20.8
What Is Good About Coupons				
Makes sure benefits are spent on food	26.0	36.5	26.4	39.0
No taxes charged	20.4	29.9	15.2	22.1
Can budget food expenses better	13.4	14.8	9.2	10.6
Nothing	11.3	4.5	13.5	2.5
What Is Not Good About Coupons				
Cannot be used for items other than food	22.4	23.7	16.6	18.9
Involves going to issuance office	12.1	9.1	7.2	6.1
Need to stand in line for a long time	8.7	6.7	0.9	1.0
Feel embarrassed using benefits	3.6	5.6	5.1	4.1
Nothing	31.4	35.8	37.2	44.1
Number of Households	612	539	643	592

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

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TABLE J.9

CHECK-CASHING EXPERIENCES OF URBAN AND RURAL CHECK HOUSEHOLDS
(Percentage of Check Households)

	Urban	Rural
Place Where Checks Are Usually Cashed		
Supermarket or grocery store	71.6	68.3
Bank	17.7	27.0
Was Purchase Required to Cash Check?[a]		
Yes	39.3	22.5
No	60.7	77.5
Was a Fee Charged to Cash Check?		
Yes	15.8	3.0
No	84.2	97.0
Fee Paid to Have Checks Cashed[b]		
$0.50 or less	30.9	0.0
$0.51 to $2.00	51.6	84.2
$2.01 to $5.00	14.4	5.3
$5.01 or more	3.1	10.5
Mean Fee[b]	$1.53	$2.42
Median Fee[b]	$1.00	$2.00
Sample Size	612	643

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration, household survey.

[a]Includes only households that cashed checks at retail stores (Urban = 481; Rural = 458).

[b]Includes only households that paid a fee to have checks cashed (Urban = 97; Rural = 19).

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APPENDIX K

LETTERS AND BROCHURE SENT TO CASH-OUT HOUSEHOLDS

Once the initial sample of cash-out households was chosen, those households had to be notified about their selection. A letter from the Department of Human Resources county office was sent to all cash-out households explaining cash-out and describing the checks that cash-out households would be receiving; that letter is the first letter in Appendix K. A similar letter was sent to the supplemental households (households added to the cash-out sample after the initial sample was drawn, to compensate for attrition from the demonstration); that letter is the second letter in Appendix K. An informational pamphlet was enclosed with the letters; a copy of that pamphlet is included after the letters in Appendix K.

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CLAY .
DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 725
ONE MEMORIAL DRIVE
ASHLAND, ALABAMA 36251

TELEPHONE NO : 354 7196
DHR NUMBER : 140000

STATE OF ALABAMA
DEPARTMENT OF HUMAN RESOURCES

RT 44, BOX 44
LINEVILLE AL 40406

DEAR MR/MS

In cooperation with the U.S. Department of Agriculture, the Food Stamp Program is testing a new way to distribute food stamp benefits. In this project, a small number of households are selected at random by computer to receive a state check instead of food stamps. This test will run until about March 1991.

We are reviewing your application for the Food Stamp Program. If you are approved, you will receive a check by mail instead of food stamp coupons. You should receive your first check within 5 days of this notice. During this project, you will receive a check in the mail by the 10th day of the month as long as you are eligible for food stamps.

If you are also receiving state checks for other assistance programs (such as ADC), you will receive a separate check just for your food stamp benefits. Each check will identify the benefit it covers.

Most food stores will cash the check for free when you buy food. (They may require some identification, such as your food stamp id card.) Sales tax will be charged for food you buy with cash. Your food stamp check will be the same amount as your food stamp coupons plus an additional 7% to cover the sales tax.

If you are approved for food stamp benefits, your notice of approval will refer to food stamps. For you, this will mean the check you will receive each month.

The attached pamplet gives more information about this project. If you have any questions about this letter, please contact your county Food Stamp Office at the address below.

CLAY
DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 725
ONE MEMORIAL DRIVE
ASHLAND, ALABAMA 36251

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CLAY
DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 725
ONE MEMORIAL DRIVE
ASHLAND, ALABAMA 36251

TELEPHONE NO : 354-7156
DHR NUMBER : 140000

STATE OF ALABAMA
DEPARTMENT OF HUMAN RESOURCES

RT BOX
LINEVILLE AL 40406

DEAR MR/MS:

In cooperation with the U.S. Department of Agriculture, the Food Stamp Program is testing a new way to distribute food stamp benefits. In this project, a small number of households are selected at random by computer to receive a state check instead of food stamps.

You have been chosen for this project. Beginning with the month of , you will receive a check by mail instead of food stamp coupons. If you are also receiving state checks for other assistance programs (such as ADC), you will receive a separate check just for your food stamp benefits. Each check will identify the benefits it covers. The attached pamphlet gives more information about this project.

If your household is required to monthly report and your case is now in suspense you will receive a check, rather than food stamp coupons, when you receive benefits again.

You must participate in this project if you wish to continue to receive food stamp benefits. This test will run for about a year.

Most food stores will cash the check for free when you buy food. (They may require some identification such as your food stamp id card.) Sales tax will be charged for food you buy with cash. Your food stamp check will be the same amount as your food stamp coupons plus an additional 7% to cover the sales tax.

If you have any questions about this letter, please contact your county Food Stamp Office at the address below.

CLAY
DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 725
ONE MEMORIAL DRIVE
ASHLAND, ALABAMA 36251

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A NEW WAY TO GET FOOD STAMP BENEFITS

In cooperation with the United States Department of Agriculture, Food and Nutrition Service, the Food Stamp Program will test a new way to get food stamp benefits. Beginning April 1, 1990, some households will receive a check instead of food stamps. The test will last one year.

WHO WILL GET A FOOD STAMP CHECK?

About 1850 food stamp households from 12 counties will be included in the test to get a check instead of food stamps. These households will be chosen at random by computer. If chosen, the household MUST accept a check instead of food stamps. Households chosen to get a check will be notified by mail. Checks will be mailed to the household.

CAN A HOUSEHOLD CHOOSE TO RECEIVE A CHECK INSTEAD OF COUPONS?

No. Only those households chosen at random by computer can get a food stamp check. All other eligible food stamp households will continue to receive food stamp coupons.

HOW MUCH WILL THE FOOD STAMP CHECK BE?

The food stamp check will be the same amount as the household's food stamp coupons would have been plus an additional 7% to help pay for sales tax. For example, a household approved for a $100 food stamp allotment would receive a check for $107. The $7 is for sales tax. People who buy food with food stamp coupons do not pay sales tax.

WILL ELIGIBILITY RULES BE DIFFERENT?

No. Eligibility rules will be the same for households receiving a food stamp check as for households receiving food stamp coupons.

WILL A FOOD STAMP CHECK AFFECT OTHER BENEFITS?

No. Receiving a food stamp check will be the same as receiving food stamp coupons. A food stamp check will not change the amount of other benefits such as Aid to Dependent Children, Social Security, SSI, housing assistance through HUD, WIC, the school lunch program or the school breakfast program.

HOW CAN A FOOD STAMP CHECK BE CASHED?

Most stores and banks will cash food stamp checks if proper identification is available. When taking the check to be cashed, the household member should take identification such as the Household Identification Card or Driver's License.

A REMINDER!

If you receive a food stamp check, you will not receive food stamp coupons.

A food stamp check is intended to buy food for the household just as food stamp coupons.

QUESTIONS?

If you have questions about this new program, call or write your county Food Stamp Office.

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APPENDIX L

ISSUANCE PROBLEM SURVEY INSTRUMENT

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ALABAMA FOOD STAMP CASH-OUT DEMONSTRATION

ISSUANCE PROBLEM SURVEY

Worker:_____ Co.:_____ Date:_____

Case ID:_____ Client:_____

1. What was the issuance problem?

CIRCLE ALL THAT APPLY

- Data entry procedure or sequence was unknown or didn't work.....1
- Client never received the warrant.....2
- Client received the warrant, but it was destroyed, lost, or stolen before being endorsed and cashed by the client.....3
- Warrant amount or payee incorrect.....4
- Other (SPECIFY):_____...5

_____

_____

2. How did you find out about the problem?

CIRCLE ALL THAT APPLY

- Upon attempting to enter data into the computer.....1
- Off-line printed report, "Outstanding Returned Warrants".....2
- Client.....3
- Other (SPECIFY):_____...4

_____

_____

3. What steps did you take to resolve the problem?

CIRCLE ALL THAT APPLY

- I contacted the Alabama DHR for more information.....1
- I contacted the client for more information.....2
- I corrected client records.....3
- I corrected computer records.....4
- I had the client sign an affidavit regarding a lost warrant.....5
- Other (SPECIFY):_____...6

_____

_____

4. What was the resolution of the problem?

CIRCLE ALL THAT APPLY

- Computer or data entry problem was corrected...1
- Client address was corrected.....2
- Original warrant was eventually received by client.....3
- Original warrant was voided.....4
- Replacement or supplemental warrant was issued.....5
- Other (SPECIFY):_____...6

_____

_____

5. How many days passed between the time that you first became aware of the problem and its final resolution?

|__|__| DAYS

6. How much of your actual time was spent resolving this problem? Include the time spent entering data, checking records, locating or contacting the client, updating records, etc. **PLEASE RECORD MINUTES AND/OR HOURS.**

|__|__| HOURS AND/OR |__|__| MINUTES

7. Thank you very much for your time and cooperation. We would like to call you if we have questions about this case. **PLEASE RECORD YOUR OFFICE TELEPHONE NUMBER BELOW.**

|__|__|__|-|__|__|__|__| TELEPHONE NUMBER

EXTENSION *(if any)* _____

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APPENDIX M

TECHNICAL INFORMATION ON THE ESTIMATION OF CASH-OUT ISSUANCE, PLANNING, AND IMPLEMENTATION COSTS

The purpose of this appendix is to describe how we calculated (1) county, state, and federal coupon- and cash-issuance costs, and (2) the costs of planning and implementing the cash-out demonstration. The issuance costs are direct costs only, and do not include indirect costs, such as overhead. They include labor costs (salary and fringe benefits) for all staff involved in issuance; postage for all mail issuance; insurance, transportation, security, and storage for coupons; paper and printing for warrants; and federal costs for the printing, storage, distribution, and shipping of coupons; Federal Reserve Bank fees for coupons and checks, and the costs of authorizing and monitoring retail stores. Because overhead is not included, the cost difference between coupon and cash issuance might be somewhat understated; overhead might be somewhat lower under cash issuance, because the use of such resources as physical space might be less.

A. COUNTY-LEVEL COUPON-ISSUANCE COSTS

To calculate county-level coupon issuance costs, we first obtained from the Alabama Cash-Out Project Manager a list of state biweekly salary ranges (as shown in Table M.1), and a list of the county-level workers, with their salary ranges identified. We assigned the midpoint of the salary range to each worker and entered the position and salary range into Table M.2. Salaries of specific workers are not identified; we use position titles, rather than workers' names.

For each county office that we visited, on the basis of the information obtained during the site visits, we added up the total percentage or amount of time spent on coupon issuance each month for each worker who was involved in issuance in any way. We calculated monthly salaries by multiplying the biweekly salary by 26 and dividing the result by 12; we calculated hourly rates by dividing the biweekly rate by 80. Table M.3 shows the time spent on issuance by each worker, the monthly or hourly salary, the monthly direct labor cost of issuance for that worker, and the total monthly direct labor cost of issuance for each county. Note the wide range in staffing patterns; in one county, for

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TABLE M.1

BIWEEKLY SALARY RANGES, STATE OF ALABAMA, 1990

Range Number	From	To
28	359.80	460.50
42	471.90	650.20
44	495.60	683.10
46	507.80	717.70
50	560.70	792.90
51	560.70	812.70
56	619.20	918.50
58	650.20	964.90
59	666.30	989.40
64	735.90	1,118.00
68	812.70	1,232.00
71	874.60	1,325.00
72	918.50	1,393.00
73	964.90	1,463.00
74	1,014.00	1,536.00
75	1,065.00	1,614.00
76	1,118.00	1,695.00
77	1,174.00	1,783.00
78	1,232.00	1,876.00
82	1,536.00	2,342.00

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

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TABLE M.2

COUNTY-LEVEL STAFF SALARY INFORMATION

Position, County, and Salary Range Number	Midpoint of Biweekly Salary Range
DHR Directors	
Clay County (76)	$1,406.50
DeKalb County (76)	1,406.50
Fayette County (76)	1,406.50
Jefferson County (Bessemer Office) (73)	1,213.95
Program Supervisors	
Clay County (68)	1,022.35
Conecuh County (68)	1,022.35
Dale County (68)	1,022.35
DeKalb County (71)	1,022.35
Fayette County (68)	1,022.35
Jefferson County (Main Office, PA) (73)	1,213.95
Jefferson County (Main Office, NPA) (73)	1,213.95
Lauderdale County, PA (68)	1,022.35
Lauderdale County, NPA (68)	1,022.35
Issuance Supervisors	
Jefferson County (Bessemer Office) (51)	686.70
Jefferson County (Bessemer and Main Offices) (68)	1,022.35
Jefferson County (N. Birmingham Office) (68)	1,022.35
Montgomery County (56)	768.85
Account Clerk	
Jefferson County (Main Office) (50)	676.80
Issuance Cashiers	
Clay County (50)	676.80
Conecuh County (50)	676.80
Dale County (42)	561.05
DeKalb County (46)	612.75
Fayette County (46)	612.75
Jefferson County (Bessemer Office) (44)	589.35

Position, County, and Salary Range Number	Midpoint of Biweekly Salary Range
Issuance Cashiers (continued)	
Jefferson County (Bessemer Office) (46)	612.75
Jefferson County (Bessemer Office) (46)	612.75
Jefferson County (Main Office) (44)	589.35
Jefferson County (Main Office) (44)	589.35
Jefferson County (N. Birmingham Office) (46)	612.75
Lauderdale County (46)	612.75
Montgomery County (44)	589.35
Montgomery County (44)	589.35
Issuance Receptionists	
Fayette County (46)	612.75
Jefferson County (Bessemer Office) (42)	561.05
Jefferson County (Main Office) (46)	612.75
Jefferson County (N. Birmingham Office) (42)	561.05
Montgomery County (42)	561.05
Data Entry Clerks	
	612.75
Clay County (46)	827.85
Conecuh County (59)	561.05
DeKalb County (42)	612.75
Fayette County (46)	612.75
Lauderdale County (46)	
Food Stamp Certification Workers	
	807.55
Clay County (58)	807.55
Fayette County (58)	827.85
Jefferson County (Main Office) (59)	827.85
Jefferson County (Main Office) (59)	827.85
Jefferson County (Main Office) (59)	
AFDC Eligibility Worker	
Clay County (59)	827.85

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

PA = Public Assistance; NPA = Non-Public Assistance; AFDC = Aid to Families with Dependent Children.

TABLE M.3

MONTHLY DIRECT LABOR COST OF COUPON ISSUANCE, BY COUNTY

County	Position	Time Period	Total Time on Issuance	Salary	Direct Labor Cost	County Total Direct Labor Cost
Clay	Supervisor	Entire month	30%	$2,215/mo.	$665	$1,263
	Cashier	3 OTC days	100%	1,466/mo.	203	
	Cashier	Rest of month	2.5 hrs./day	8.46/hr.	395	
Conecuh	Supervisor	Entire month	25%	2,215/mo.	554	2,090
	Cashier	1st half of month	100%	1,466/mo.	733	
	Cashier	2nd half of month	6.5 hrs./day	8.46/hr.	596	
	Clerk	10 mail days	2 hrs./day	10.35/hr.	207	
Dale	Supervisor	Entire month	25%	2,215/mo.	554	1,468
	Cashier	1st 10 days	100%	1,215/mo.	561	
	Cashier	Rest of month	25%	1,215/mo.	161	
	Clerk	1 mail day	2.5 hrs./mo.	7.66/hr.	192	
DeKalb	Director	Entire month	20%	3,047/mo.	609	3,536
	Supervisor	Entire month	75%	2,383/mo.	1,787	
	Cashier	1st half of month	100%	1,328/mo.	664	
	Cashier	Rest of month	70%	1,328/mo.	465	
	Clerk	Entire month	1.5 hrs./mo.	7.01/hr.	11	
Fayette	Supervisor	Entire month	22.5%	2,215/mo.	498	2,211
	Receptionist	1st 10 days	75%	1,328/mo.	459	
	Receptionist	Rest of month	7.5%	1,328/mo.	59	
	Cashier	Entire month	90%	1,328/mo.	1,195	
Jefferson	Supervisor	Entire month	5%	1,488/mo.	74	16,982
	Receptionist	1st 15 days	100%	1,216/mo.	839	
	Receptionist	Last week	50%	1,216/mo.	188	
	Cashier	Entire month	100%	1,277/mo.	1,277	

TABLE M.3 (continued)

County	Position	Time Period	Total Time on Issuance	Salary	Direct Labor Cost	County Total Direct Labor Cost
Jefferson (continued)	Cashier	1st 15 days	100%	1,328/mo.	916	
	Cashier	Last week	87.5%	1,328/mo.	360	
	Cashier	1st 15 days	100%	1,328/mo.	916	
	Cashier	Last week	87.5%	1,328/mo.	360	
	Supervisor	Entire month	60%	2,630/mo.	1,578	
	Supervisor	Entire month	9%	2,630/mo.	237	
	Supervisor	Entire month	70%	2,215/mo.	1,551	
	Clerk	Entire month	82.5%	1,466/mo.	1,210	
	Receptionist	Entire month	100%	1,328/mo.	1,328	
	Cashier	Entire month	100%	1,277/mo.	1,277	
	Cashier	Entire month	100%	1,277/mo.	1,277	
	Clerk	Entire month	12 hrs./mo.	7.66/hr.	92	
	Supervisor	1st 15 days	40%	2,215/mo.	613	
	Receptionist	1st 15 days	100%	1,216/mo.	841	
	Cashier	1st 15 days	100%	1,328/mo.	919	
Jefferson County						
Leeds Office		Entire month			671	
Adamsville Office		Entire month			458	
Lauderdale	Supervisor	Entire month	75%	2,215/mo.	1,661	3,340
	Supervisor	Entire month	10%	2,215/mo.	222	
	Cashier	1st 14 days	100%	1,328/mo.	863	
	Cashier	Rest of month	95%	1,328/mo.	441	
	Clerk	Entire month	20 hrs./mo.	7.66/hr.	153	
Montgomery	Supervisor	Entire month	100%	1,666/mo.	1,666	4,844
	Claims Super.	Entire month	10 hrs./mo.	9.61/hr.	96	
	Receptionist	Entire month	100%	1,216/mo.	1,216	
	Cashier	1st 10 days	100%	1,277/mo.	589	
	Cashier	Entire month	100%	1,277/mo.	1,277	

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

OTC = over the counter.

example, the county Department of Human Resources (DHR) director was involved in coupon issuance, primarily in reconciling the inventory and in completing reports. In addition, the amount of time spent on issuance by the program supervisors varied widely among the counties. These differences were the result of variations in interest, expertise, and customs among the staffs.

We calculated total coupon-issuance costs per case-month, as shown in Table M.4. A county's per-case-month cost of coupon issuance is obtained by dividing its total monthly cost by its monthly food stamp caseload; thus, costs pertaining to caseloads of different sizes can be compared. "Caseload" refers to the number of households that received benefits during the month.

We then completed Table M.4 as follows:

- We calculated fringe benefits as 25 percent of total direct labor costs; we obtained that 25 percent figure from the Alabama Cash-Out Project Manager.
- We obtained security costs during the site visits.
- We obtained postage costs from the supervisor in the state Food Stamp Accounting office.
- To obtain the cost per case-month, we divided total costs by the October 1990 caseload.
- To fill in costs for the four demonstration counties that we did not visit, all of which are rural, we obtained per-case-month costs for the six visited rural counties for labor, security, and postage, and multiplied by the caseload of the unvisited counties (8,435). We added the costs and divided by the caseload of the unvisited counties, obtaining a total coupon-issuance cost per case-month for those four counties of $2.09.
- We then added all categories of costs, divided by the total caseload for all 12 demonstration counties (51,071), and obtained a cost per case-month for all demonstration counties of $1.32.

Storage, transportation, and insurance costs, many of which are incurred at the county level, are paid for at the state level. In many cases, these costs cannot be separated out by county. Therefore, they are covered in the section on state costs.

TABLE M.4

COUNTY-LEVEL COUPON ISSUANCE COSTS PER CASE-MONTH

County	Direct Labor	Fringes	Security	Postage	Total Cost	Monthly Caseload[a]	Cost per Case-Month
Clay	$1,263	$316	$---	$25	$1,604	377	$4.25
Conecuh	2,090	523	---	175	2,787	1,375	2.03
Dale	1,468	367	---	74	1,909		1.14
DeKalb	3,536	884	---	---	4,420	1,882	2.35
Fayette	2,211	553	---	---	2,7	960	2.88
Jefferson[b] (U)	16,982	4,246	4,000	94	25,322	23,703	1.07
Lauderdale	3,340	835	30	211	4,416	2,328	1.90
Montgomery (U)	4,844	1,211	552	83	6,690	10,344	0.65
Total for Visited Urban Counties	21,826	5,457	4,552	177	32,012	34,047	0.94
Total for Visited Rural Counties	13,908	3,477	30	485	17,900	8,589	2.08
Total for Four Unvisited Rural Counties[c]	13,665	3,416	25	506	17,612	8,435	2.09
Total for All Demonstration Counties[d]	49,399	12,350	4,607	1,168	67,524	51,071	1.32[e]

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

U = urban county.

TABLE M.4 (continued)

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[a]For October 1990.

[b]Labor costs for each Jefferson County office are as follows:

Bessemer	$4,930.87
Main	8,548.61
N. Birmingham	2,373.76
Leeds	671.07
Adamsville	457.61

[c]Site visits were not conducted in four rural counties--Choctaw, Dallas, Marion, and Pickens. However, so that the per-case-month cost for the 12 demonstration counties was not biased toward the lower urban figure ($0.94, compared with $2.08 for the rural visited counties), we estimated the issuance costs in these counties on the basis of the average per-case-month cost by category in the 6 rural counties that we did visit, added those estimates to the total, and calculated a new total per-case-month cost for all 12 demonstration counties.

[d]This estimate is based on a caseload count that includes cash-out households. If cash-out households were excluded, the total cost per case-month would be 5 percent higher.

[e]This cost figure reflects the 67 percent urban/33 percent rural composition of the demonstration counties' caseload. If this estimate is weighted to reflect the statewide 46/54 composition, it increases to $1.53 per case-month.

B. COUNTY-LEVEL CASH-ISSUANCE COSTS

Most of the costs of cash issuance of food stamp benefits in Alabama were incurred at the state level. The only notable county-level cost of cash issuance was the time spent by certification and eligibility workers to resolve cash-issuance problems.[1] To obtain data on the amount of time that the workers spent on cash-issuance problems, we conducted a mail survey of all eligibility and certification workers in the 12 demonstration counties. This survey asked the workers about their experience with cash-issuance problems during the cash-out demonstration, including the types of problems encountered, how those problems were resolved, and the time spent resolving them. The one-page instrument (shown in Appendix L) was sent to each of the 87 certification and eligibility workers who had dealt with one or more cash-issuance problems, and asked about each of the 152 cash-issuance problems that were officially recorded during the period of May through October 1990. The response rate was 100 percent.

Based on the surveys received from the workers, the average time spent resolving cash-issuance problems, from May through October, was 1.04 hours per problem. The average biweekly salary midpoint for certification and eligibility workers, from Table M.2, is $819.73, which is $10.25 per hour. Table M.5 shows the number of issuance problems in October for each county office, and the corresponding labor costs. October was used as a representative month for cash issuance, because it was the fifth month of cash-out; as software and procedural problems were worked out during those months, and workers and clients became accustomed to the cash system and its requirements, the number of cash-issuance problems fell significantly--from 59 problems in May, to 10 problems in October. The cost of resolving the cash-issuance problems in October was $0.06 per case-month for cash-issuance cases, down from $0.38 in May.

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[1]In Alabama, "certification worker" refers to caseworkers who handle food stamp applications, and "eligibility worker" refers to caseworkers who handle Aid to Families with Dependent Children (AFDC) applications, including joint AFDC and food stamp applications. Thus, the certification workers resolve food stamp issuance problems for households receiving food stamps but not receiving AFDC, and the eligibility workers resolve food stamp issuance problems for households receiving both food stamps and AFDC.

TABLE M.5

COUNTY-LEVEL CASH-ISSUANCE COSTS
PER CASE-MONTH

	Number of Issuance Problems, October 1990	Direct Labor Cost[a]	Fringe Benefits	Total Labor Cost
Choctaw	0	$0	$0	$0
Clay	0	0	0	0
Conecuh	1	10.66	2.67	13.33
Dale	2	21.32	5.33	26.65
Dallas	1	10.66	2.67	13.33
Dekalb	0	0	0	0
Fayette	0	0	0	0
Jefferson	1	10.66	2.67	13.33
Lauderdale	1	10.66	2.67	13.33
Marion	0	0	0	0
Montgomery	1	10.66	2.67	13.33
Pickens	3	31.98	8.00	39.98
Total	10	106.60	26.68	133.28
Per case-month[b]				0.06

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]The average biweekly salary midpoint for eligibility and certification workers was $819.73, or $10.25 per hour. According to the mail survey of the workers, the average time spent handling one problem was 1.04 hours.

[b]Based on a cash-issuance caseload in October of 1990 of 2,124.

C. STATE-LEVEL COUPON-ISSUANCE COSTS

We estimated state-level coupon-issuance costs as follows. For all state workers involved in coupon issuance or in planning or implementing the demonstration, we added up their time in a way analogous to that used for county workers. The salary range midpoints for these staff are shown in Table M.6; as with county-level workers, salaries of specific workers are not identified. The number of state staff involved in coupon issuance is small; it includes Food Stamp Accounting staff in the Fiscal Administration Division (to compile and maintain reports and to oversee the state bulk storage supply), auditors in the DHR Audit Office (to count the bulk storage inventory and to complete the FNS-250 and FNS-260 reports), and staff in the Information Systems Division (to produce the food stamp coupon issuance listings). Their labor costs were estimated as follows:

- The supervisor of Food Stamp Accounting, Fiscal Administration Division, reported that she spends 25 percent of her time maintaining inventory and issuance records and ordering the state bulk storage supply. Twenty-five percent of her monthly salary ($3,203.42) equals $800.86 in direct labor costs. With the 25 percent fringe figure, the total cost for coupon accounting is $1,001.08.

- The DHR auditor reported that he spends roughly four hours per month completing the FNS-250 and FNS-260 reports (at an annual salary of around $42,000), which amounts to $161.52, plus $40.38 for fringe benefits. In addition, his food stamp auditor in Gadsden spends about three hours per month counting the physical inventory (at an annual salary of around $32,000), and is reimbursed for the mileage for the 125-mile round trip, at 22.5 cents per mile; his time costs $92.31, plus $23.08 for fringe benefits, plus $28.13 for mileage. Thus, the total cost for coupon auditing is $345.42.

- The unit supervisor in Food Stamp Program Maintenance within the Information Systems Division spends approximately one hour every day producing the food stamp coupon issuance listings. His monthly salary is $2,762.93; one hour per day is 12.5 percent of his time; thus, the monthly direct labor cost is $345.37. With fringe benefits, that cost is $431.71.

We then completed Table M.7, with insurance, storage, and transportation costs from the Finance Division. The average monthly caseload for FY 1990 was used as the denominator, as several of the state-level coupon-issuance costs were average monthly figures for FY 1990.

TABLE M.6

STATE-LEVEL STAFF SALARY INFORMATION

Name, Position, and Salary Range Number	Midpoint of Biweekly Salary Range
Food Stamp Division	
Acting Director (78)	$1,554.00
Cash-Out Project Manager (76)	1,406.50
Cash-Out Trainer (73)	1,213.95
Policy Analyst (68)	1,022.35
Information Systems Division	
Night Shift Supervisor (64)	926.95
Finance Division	
Supervisor, Food Stamp Accounting (77)	1,478.50
Clerk-Typist II (46)	612.75
Clerk-Typist (50)	676.80
Comptroller's Office	
Supervisor, Warrant Control (77)	1,478.50
Clerk-Typist II (46)	612.75
Treasurer's Office	
Manager (78)	1,554.00
Data Entry Supervisor (56)	768.85
Four Data Entry Operators (50)	676.80
Micrographic Technician (50)	676.80
One to Two Temporary Hires (28)	410.15

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

TABLE M.7

STATE-LEVEL COUPON-ISSUANCE COSTS
PER CASE-MONTH

Type of Coupon-Issuance Cost	Amount
Accounting (Direct Labor and Fringe Benefits)	$1,001.08
Auditing (Direct Labor, Fringe Benefits, and Mileage)	345.42
Production of Issuance Listings (Direct Labor and Fringe Benefits)	431.71
Insurance	3,000.00
Storage	10,000.00
Transportation	21,666.67
Total Cost	36,444.88
Cost per Case-Month	0.22 [a]

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]Based on an average statewide monthly caseload in FY1990 of 165,752.

D. STATE-LEVEL CASH-ISSUANCE COSTS

The monthly labor costs for state-level cash issuance (as shown in Table M.8) were calculated as follows:

- **Data Systems Management Division.** The night shift operator starts and monitors the batch processing job for producing the warrants. This operation takes 30 minutes per night for the entire month, regardless of how many food stamp checks are processed. His monthly salary is $2,008.39. Thirty minutes is 6.25 percent of his time; thus, the monthly direct labor cost is $125.52. With fringe benefits, that cost is $156.90.

- **Treasurer's Office.** This office uses eight staff to process 20,000 checks per day. Staff and biweekly salaries are: manager, $1,554.00; supervisor, $768.85; data entry operators (4), $2,707.20; micrographic operator, $676.80; temporary hires (1.5), $615.23. Thus, the total is $6,322.08. Adding in fringe benefits gives $7,902.60, which is the total biweekly labor cost. Dividing $7,902.60 by ten days equals $790.26 per day; dividing $790.26 by 20,000 (the number of checks processed per day) equals $0.04 per check.

- **Fiscal Administration--Food Stamp Accounting.** This office did not handle any part of the check-issuance process until the food stamp cash-out demonstration started up; the staff were then brought into the process only during the cash-out demonstration, and only for food stamp checks. The total monthly direct labor and fringe benefits cost for check issuance for this office is $630.73, estimated as follows:

  -- The supervisor checked warrant numbers and dates on the payroll register for food stamp checks and signed the payroll register. Overall, cash issuance took 5 percent of her time; $3,203.42 (monthly salary) x .05 = $160.17 for the entire month. Adding in fringe benefits gives a total of $200.21.

  -- The clerk took the payroll register for food stamp checks to the Comptroller's Office every day; filled out the bulk mailing form on the first day of the month; picked up the checks; crossed out the permit imprint; bundled the envelopes; and took them to the mailing room every day, for the rest of the month. This took 25 minutes on the first day of the month: 25 minutes = .42 hour; $8.46 (hourly salary) x .42 = $3.55 for the first day. It took one hour per day for the rest of the month: 8.46 x 20.67 days = $174.87. $3.55 + $174.87 = $178.42 for the entire month. Adding in fringe benefits gives a total of $223.03.

TABLE M.8

STATE-LEVEL CASH-ISSUANCE COSTS
PER CASE-MONTH

Type of Cash-Issuance Cost	Amount
Data Systems Management Division (Direct Labor and Fringe Benefits)	$156.90
Treasurer's Office at $.04 per Check	84.96 [a]
Fiscal Administration Division--Food Stamp Accounting (Direct Labor and Fringe Benefits)	630.73
Comptroller's Office--Warrant Division, Audit Division, and Data Processing (Direct Labor and Fringe Benefits)	199.01
Warrant Forms at $.01 per Check	21.24 [a]
Information Systems Consultant	433.40
Postage, October 1990	531.00
Total Cost	2,057.24
Cost per Case-Month	0.97 [a]

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

[a]Based on a cash issuance caseload in October 1990 of 2,124.

she was spending only one hour per day on them, at an hourly rate of $7.66. $7.66 x 21.67 days = $165.99 for the entire month. Adding in fringe benefits gives a total of $207.49.

- **Comptroller's Office.** From Comptroller's Office data, we obtained the cost of warrant forms, which was $0.01 per warrant. From staff interviews, we estimated the total cost for three employees at $199.01, as follows:

  -- The clerk totals charge-out records to ensure sufficient funds; creates the warrant file and assigns warrant numbers; checks warrants against the tally sheet; and monitors the printing and sealing. This takes 65 to 70 minutes on the first day of the month, and 35 to 40 minutes per day during the rest of the month. 65 to 70 minutes = 1.125 hours; $7.66 (hourly salary) x 1.125 = $8.62 for the first day of the month. 35 to 40 minutes = .625 hours; $7.66 x .625 x 20.67 days = $98.96 for the rest of the month. $8.62 + $98.96 = $107.58 for the month. Adding in fringe benefits gives a total of $134.48.

  -- After the clerk creates the warrant file, the accountant checks to ensure that the funds were processed correctly. This job takes five minutes per day, at an average hourly salary of $11.61. Five minutes = .083 of an hour; $11.61/hour x .083 x 20.67 days = $19.92 for the month. Adding fringe benefits gives a total of $24.90.

  -- The supervisor checks warrants and compares them with the payroll register. This job takes 20 minutes on the first day of the month, and five minutes per day during the rest of the month. Twenty minutes = .33 hour; $18.48 (hourly salary) x .33 = $6.10 for the first day. Five minutes = .083 of an hour; $18.48 x .083 x 20.67 = $31.70 for the month. Adding in fringe benefits gives a total of $39.63.

- **Software Development Consultant.** The consultant spent about 30 minutes per day on the downline cash-issuance listings. His "loaded" hourly rate (which included such costs as fringe benefits and contractor fees) was $40 per hour; thus, his cost is $20 x 21.67 = $433.40.

- **Postage.** We obtained postage costs from the supervisor of Food Stamp Accounting.

E. FEDERAL COUPON-ISSUANCE COSTS

We obtained estimates of federal coupon-issuance costs from Kirlin et al. (1990). Those per-case-month cost estimates were as follows: coupon printing, $0.17; coupon storage, distribution, and shipping, $0.02; Federal Reserve Bank fees, $0.16; and authorizing and monitoring retail stores, $0.13. The costs were for 1988; to update them to 1990, we obtained the fixed-weighted price indices for federal nondefense purchases of goods and services, from the *Survey of Current Business* (1990 and

1991). The index was 118.0 in 1988, and 127.6 in 1990, for a change of 8.1 percent. An 8.1 percent increase in the 1988 federal costs produces the following per-case-month costs: coupon printing, $0.18; coupon storage, distribution, and shipping, $0.02; Federal Reserve Bank fees, $0.17; and authorizing and monitoring retail stores, $0.14. Thus, federal coupon costs were $0.51 per case-month.

F. FEDERAL CASH-ISSUANCE COSTS

The operating and imputed costs of check collection by the Federal Reserve System in 1990 were $526.1 million (U.S. Federal Reserve System, Board of Governors, 1991). The Federal Reserve Banks handled 18.6 billion checks. Dividing $526.1 million by 18.6 billion produces a per-check cost of $0.03.

G. COMPARISON OF CASH- AND COUPON-ISSUANCE COSTS

Table M.9 presents a comparison of per-case-month costs under cash and coupon issuance, summarized from the preceding tables and sections.

H. PLANNING AND IMPLEMENTATION COSTS

Planning and implementation costs totalling $182,789 were incurred by staff training, software development, policy development, and producing the informational brochure. Table M.10 summarizes these costs, which we discuss in this section.

1. Training Costs

Table M.11 details the state and county labor costs for training, which we estimated as $25,501.04. With fringe benefits, the cost totaled $31,876.30. We estimated the mileage and per-

TABLE M.9

COMPARISON OF PER-CASE-MONTH COSTS
OF COUPON AND CASH ISSUANCE

Level	Direct Cost per Case-Month	
	Coupon	Cash
County	$1.32	$0.06
State	0.22	0.97
Federal	0.51	0.03
Total	2.05	1.06

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

TABLE M.10

COSTS OF PLANNING AND IMPLEMENTING
ALABAMA'S CASH-OUT DEMONSTRATION

Type of Cost	Amount
Software Development (Technical Labor Costs)	$137,025
Staff training (Labor and Per Diem Costs)	37,155
Policy development (Labor Costs)	6,739
Brochure (Printing and Mailing Costs)	1,870
Total	182,789

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

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TABLE M.11

LABOR COSTS FOR STATE AND COUNTY STAFF TO ATTEND CASH-OUT TRAINING SESSIONS

Number of Persons Trained	Type of Staff	Number of Hours of Training per Person	Total Hours in Training	Transportation Hours	Total Hours	Hourly Rate	Labor Cost
12	County DHR directors	8	96	80	176	$16.98	$2,988.48
20	Program supervisors	8	160	128	288	13.50	3,888.00
8	Issuance supervisors	4	32	12	44	10.94	481.36
30	Receptionists	4	120	80	200	7.27	1,454.00
30	Cashiers	4	120	80	200	7.62	1,524.00
120	Certification workers	4	480	320	800	10.25	8,200.00
120	Clericals	4	480	320	800	8.13	6,504.00
10	State staff	4	40	0	40	11.53	461.20
350	Total		1,528	1,020	2,548		25,501.04

SOURCE: Evaluation of the Alabama Food Stamp Cash-Out Demonstration.

diem costs incurred by 200 staff from outside Montgomery and Birmingham Counties to travel to Montgomery and Birmingham, as follows:

- Mileage: 200 persons at four persons per car = 50 trips. A second trip for approximately 20 directors and supervisors from ten counties = 10 trips. A total of 60 trips, at 200 miles per round trip = 12,000 miles. 12,000 miles x $.225 (state allowance) = $2,700 for mileage

- Per diem: $5 per diem for one trip for 200 people = $1,000. $5 per diem for the second trip for 20 directors and supervisors = $100. $1,000 + $100 = $1,100 for the per diem

- Mileage and per diem: $2,700 + $1,100 = $3,800

In addition, the Cash-Out Trainer spent 78 hours preparing written materials and conducting training, for a total cost of $1,479.08 (including fringe benefits). Thus, the total training costs amounted to $37,155.38.

2. Software Development Costs

Software development costs were incurred by both contract and state employees, as follows:

- For the *contract* employees involved in the software development, the loaded hourly rates (that is, such costs as fringe benefits and contractor fees), number of hours, and total cost were:

  -- Software Development Consultant: $40/hour, 1,384 hours, $55,360
  -- Systems Analyst 1: $25/hour, 692 hours, $17,300
  -- Systems Analyst 2: $28/hour, 1,384 hours, $38,752
  -- Systems Analyst 3: $15/hour, 692 hours, $10,380
  -- Systems Analyst 4: $25/hour, 173 hours, $4,325
  -- Total: $126,117

- For the *state* employees involved in the software development, the hourly rates, number of hours, and total cost were:

  -- Systems Analyst 1: $15.17/hour, 260 hours, $3,944.20
  -- Systems Analyst 2: $15.94/hour, 300 hours, $4,782.00
  -- Total: $8,726.20. With fringe benefits, total: $10,907.75